Letter from the Director:

The Division of Physical Therapy currently has one post doctoral trainee and four PhD students who are working under the guidance of their faculty mentors to advance the science of human movement. The post doctoral trainee is Lisa Zukowski, PhD, who is working with Prudence Plummer, PhD, on research to determine how healthy older adult who are identified as “fallers” differ from those who do not have a history of falls. Drs. Zukowski and Plummer will measure and compare how these fallers and non-fallers differ during walking in a real-world setting (relative to a laboratory) in terms of gait adaptability, visual information processing and attention, cognitive processing, and environmental hazard avoidance. Dr. Zukowski is from Houston, Texas completed her PhD in Biobehavioral Science from the University of Florida.

The four PhD students are completing their degrees in Human Movement Science (HMSC), a joint degree program with Exercise and Sport Sciences. Like Dr. Zukowski, they bring a diversity of life experiences and strong educational backgrounds to their work with the PT faculty. Jody Feld, PT, DPT is also being mentored by Dr. Plummer. Their research focuses on people who have survived a stroke and their ability to walk in real-world environments, adaptability and safety. Their goal is to develop a practical clinical measure to help predict real world ambulatory performance post stroke. Dr. Feld received her entry-level PT degree from Hahmemann University and Medical College of Pennsylvania in Philadelphia, PA and her DPT degree from Stony Brook University in Stony Brook, NY. The students are as follows: 1) Ilana Levin, PT, DPT, is working with Deborah Thorpe, PT, PhD, to measure ambulatory and balance performance in adults with cerebral palsy. 2) Mindy Mao, who studied at Beijing Sport University, is working with advisor Bing Yu, PhD, to test effectiveness of a training knee brace as part of an ACL injury prevention program. 3) Julianna Prim is working with Karen McCulloch, PT, PhD, NCS to investigate concussions in military service members. 4) Gabrielle Scronce, PT, DPT, will complete her PhD in Human Movement Science. Scronce is working with Vicki Mercer, PhD, PT, to study effects of a knee ankle foot orthosis.

UNC PT graduate Ridgely Dubel has started an innovative hotel in downtown Asheville. “After working in the field of physical therapy for almost 15 years, I saw the Bunn House as an extension of my skills as a therapist. Physical therapy seeks to restore people back to their optimal health, and I saw the Bunn House in a similar fashion; it provided an opportunity to rehabilitate an older house and bring it back to life. As this project is finishing up, my plan is to devote more time to physical therapy in the next 6-12 months. I look forward to returning to physical therapy and being able to utilize this newfound knowledge with my patients,” Dubel noted. The Bunn House is a unique hotel that brings principles of wellness and health into a historical building. While planning the Bunn House, Dubel heavily researched the factors that aid sleep quality in hotels. Her research led her to New York where she met with hotel vendors and examined different components of room design. Dubel worked with a local mattress company in Asheville to custom create mattresses that would provide the perfect sleep experience. Dubel also collaborated with the Mary Ellen Wells, Director of UNC’s Neurodiagnostics and Sleep Science program to further improve room design.

Dubel fondly recalls her time studying physical therapy at UNC. In fact, Dubel met her husband while attending UNC-CH. “I have many great memories of my time at UNC-CH and feel very fortunate to have attended such an exceptional school for my undergraduate and graduate careers. While studying for a neuroanatomy exam, I met my husband in the campus coffee shop. Through my interest in biking, I developed many strong friendships with fellow UNC-CH students. My advisor, Judy White, provided excellent feedback and was always supportive of her advisees. She frequently hosted small gatherings at her home for her students and their families, which were always a lot of fun.” Dubel’s advice to current allied health students: Diversify your interests. My mom always said, “Leave things a little better than you found them.” This can be interpreted in many ways, such as starting a recycling program in your office or arriving to work a little early and surprising your coworkers with breakfast. There are behind-the-scenes things going on that you may not even realize, but they are making this world a little better!”

UNC-CH is thankful for Ridgely Dubel’s support of the Allied Health Sciences. As she notes, “One of my favorite quotes is by St. Francis of Assisi, “Start by doing what’s necessary; then do what’s possible; and suddenly you are doing the impossible.” In studying his words, I believe it is important for all students to be given an opportunity, including services such as tutoring or other needs that might not be the norm. Funding can be pivotal in their success, and is not always available for all students or all areas of need. I feel that if a student receives the appropriate scaffolding during their academic efforts, then they will become more confident.
As director of the UNC Pediatric PT Residency program, I am excited about the commitment of faculty and staff of the Division of Physical Therapy and UNC Hospitals to develop residents who are recognized leaders in pediatric PT. Residents will develop excellence in examination, diagnosis, intervention, consultation, teaching and the integration of best evidence into the patient care they provide. They will develop resources for the community in prevention and rehabilitation of pediatrics conditions and will contribute to the profession through teaching, writing, and leadership. Graduates of the residency program will be prepared to sit for the ABPTS Pediatric Certified Specialist (PCS) examination.

The program’s curriculum is designed in modules that address all areas of the pediatric Description of Specialty Practice. The modules include study and practice in the areas of clinical reasoning, evidence-based practice, teaching and learning, acute care, school-based PT, early intervention, and outpatient care. The resident also participates in the Leadership in Neurodevelopmental Disabilities (LEND) fellowship at the Carolina Institute for Developmental Disabilities. Didactic work is a combination of online study, individualized face-to-face instruction by module mentors, and 2 interdisciplinary problem-based learning courses through LEND.

The UNC Pediatric PT Residency program has been granted candidacy status for accreditation through the American Board of Physical Therapy Residency and Fellowship Education and enrolled the first resident in August 2015.

**An Interview with Dana McCarty: Director of Clinical Education in PT**

**What brought you to the field of physical therapy?**
A combination of things led me to become a physical therapist. When I was a senior in high school, my mom suffered a terrible fall requiring extensive rehabilitation for her wrist and knee. I accompanied her to many appointments, and I realized I could see myself working one day in a role similar to the PTs who provided my mom with care and support. I went on pursue my undergraduate degree in dance and began to appreciate how my interests in healing, the human body, and the arts aligned. When I entered PT school I imagined I would eventually focus on working with athletes, possibly even with dancers, but I didn’t anticipate how my love of working with children would matter so much to me! Now, I find so much joy in walking alongside the families of little ones as they grow and develop.

**What do you hope to bring as the new Director of Clinical Education?**
As a student I remember thinking that my clinical education rotations were the opportunities I would need to affirm my decision to become a PT. These rotations meant so much to me because I knew these experiences would influence my own practice as a clinician. I hope to help students see how varied clinical experiences – even if they aren’t what you hoped or imagined – will teach you a lot about yourself as a person and as a professional. It is a way to practice what you learn in the classroom as you juggle ethical issues, social concerns, and diversity, all in a context in which you are experiencing the frustrations and joys that come along with a steep learning curve. I hope to help students process these encounters so that they can develop into the therapists they aspire to be.

**What are your hobbies/interests outside of physical therapy?**
I enjoy spending time with my husband and 8-month-old son, Micah. Everything is new and exciting to him, and I love seeing the world through his eyes. I also enjoy leading a children’s dance class at church and shopping all things fairly traded! I want to help in any way, big or small, in the effort to empower women in all parts of the world.

**What are your research interests?**
My background is in the pediatric acute care and intensive care settings. I recently submitted an article examining the neonatal characteristics associated with dolichocephaly, an abnormal cranial molding deformity, in the neonatal intensive care unit. When infants have abnormally shaped skulls, it can lead to asymmetrical development of the cervical muscles and delays in motor skills. Currently, I am evaluating the effectiveness of a device in the treatment and prevention of this cranial molding deformity in preterm infants. You can check it out on clinical trials: [https://clinicaltrials.gov/ct2/show/NCT02366936](https://clinicaltrials.gov/ct2/show/NCT02366936) As DCE, I am now in the early stages of preparing future research into clinical education.