

Throughout the COVID-19 pandemic, the UNMC Division of Physical Therapy Education keeps teaching so students can keep learning! Highlights from the fall 2020 include:

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Community Partnership: Fall 2020 Semester in Review

The Division of Physical Therapy Education carried on during the global pandemic with a combined schedule of virtual classes and both on-campus and community-based lab experiences during the Fall 2020 semester.

The faculty incorporated, and continues to use, learning experiences that follow best practice in distance education. These include a combination of live and asynchronous lecture, virtual and in-person labs, small and large group discussions, polling, discussions boards, live chats, and interactive eLearning modules. When material is presented asynchronously (recorded), faculty often follow with live sessions to answer questions, clarify content and link the material to the practice of physical therapy.

For in-person labs, the Division used engineering facility controls, administrative campus controls and policies and procedures, personal protective equipment, and cleaning and sanitizing procedures to minimize risk. Additional safety plans included the creation of **Learning Pods** consisting of eight students and a lab instructor. This allowed for reduced number of students and faculty per lab, reduced capacity in each room, attendance rosters for contact tracing, keeping lab groups the same to limit exposure and limiting the number of days per week that students were on campus. This approach was crafted using the best available evidence and recommendations. It is also being used in the Spring 2021 semester.

Using the appropriate PPE, the students completed three 2-hour labs per week. In order to de-densify campus, students learned once per week at a clinical site and twice per week on campus. This plan allowed the Division to be nimble if a directed health measure were implemented (e.g. reduced students per room, on-campus access) because all labs could shift to locations at clinical partner sites. Based on long-standing relationships with clinical partners, the Division of PT Education was positioned to limit disruptions to student learning with the contingency plans in place and ready to go, if needed.

Program Director Betsy J. Becker, PT, DPT, PhD, CLT-LANA, notes that the support of clinical partners made the **Public Private Partnership** for community labs possible, allowing students to continue to learn physical therapy skills in a safe environment.

Several community lab partners also shared their perspectives:

“Partnering with the faculty and students of UNMC Physical Therapy Education was the right thing to do. It aligns with our corporate mission of supporting education at all levels of practice, and providing support to our community during these trying times. Our employees have related great satisfaction working with students, and in this experience in particular. As owners, Joel Makovicka, Cory Sylliaasen and I are honored to share our clinicians’ expertise and provide a partnership in physical therapy education with UNMC.” – Natalie Harms, PT, MPT, DPT, GCS Emeritus (Makovicka Physical Therapy)

“This has been a great partnership for everyone involved. The students get the opportunity to learn from clinicians in the community and our staff get the opportunity to share their knowledge and expertise with our future colleagues. Everyone’s flexibility, professionalism and hard work resulted in a positive outcome for the future of our profession.” – Josh Buechler, PT (Kearney Physical Therapy)

"You all had an enormous task with reworking your entire curriculum to keep students on track and ensure they were getting their education. Kudos to you guys, glad we could be a part of the efforts!" – Ali Johnson, OTD, OTR/L, CHT (Manager, Outpatient Rehab Services, Nebraska Medicine)

Dr. Becker states, "We extend our gratitude to our community partners for collaborating with us in the education of our students. We continue to maintain a safe environment and have begun the vaccination process for students as they prepare for clinical rotations. We are firmly committed to training DPT students for entry into practice. Our curriculum provides learning experiences in team-based care, evidence-based practice, and clinical reasoning and promotes physical therapists in society. We will keep teaching so students can keep learning!"

Community Partnership: NCCE Institutional Pair



Emily L. Drew, PT, PCS, Center Coordinator of Clinical Education for the Munroe Meyer Institute's Physical Therapy Department, has been named the UNMC Division of Physical Therapy Education's Clinical Partner in UNMC's National Consortium of Clinical Educators' (NCCE) Institutional Pair.

The purpose of the NCCE Institutional Pair is to cultivate "academic-clinical partnerships that provide a collective voice in academic physical therapy in support of clinical education."
(Source Document: NCCE: Academic and Clinical Institutional Pair)

Nikki Sleddens, PT, Director of Clinical Education for the UNMC Physical Therapy Education program, serves as the Academic Member of the NCCE Institutional Pair. She said, *"I'm delighted that Emily has agreed to serve as UNMC's clinical partner. The intent of the Institutional Pair is to help bridge the gap between academic institutions and clinical sites and give clinical sites a platform to provide input regarding clinical education matters. Emily's experience and expertise as a site coordinator, clinical instructor, and LEND (Leadership Education in Neurodevelopmental and Related Disorders) Program Coordinator make her an excellent candidate to serve in this role and will ensure that the voice of clinical sites are well-represented."*

Emily states, *"Nikki and I have already been working closely together for years on clinical education through our ongoing affiliation of UNMC PT students completing clinical internships in our PT department at Munroe-Meyer Institute. This new role to me is just an extension of that partnership that allows me to provide a voice for the clinic side of PT education to the academic cohort at a more national level. Every year I learn new ways to build or improve our clinical education program at MMI and being able to share what I learn with others around the country as well as learn from other institutional-clinical pairs is a very attractive opportunity to me as Site Coordinator of Clinical Education."*

Thank you for serving, Emily!

Student Highlight: Class of 2022 Virtual Thank You to Fall 2020 Faculty



A screen shot from a December 16 Zoom Thank You meeting from the DPT Class of 2022 to the PT Education faculty.

Professional school is rigorous. Additional challenges may be encountered due to the combination of remote and in-person learning during a global pandemic. The Division has built-in mechanisms to assist all students including ADA accommodations, supplemental instruction for fall anatomy and physiology courses, faculty advisors for students, student organization support, student wellness course content, Student Health, and Student Counseling.

In the words of DPT Class of 2022 Class President Danielle Gruber, *"The outbreak of COVID-19 has created an eventful 2020 for many. I feel very fortunate to be a student at UNMC during these challenging times, as we truly have one-of-a-kind leaders. PT education faculty has gone above and beyond to not only care for us as students, but for our mental health and well-being as well. When I accepted the offer to UNMC, I had no idea just how personal my experience would become. I speak on behalf of the class of 2022 when I say we cannot express enough gratitude for all that you have done and continue to do."*

On Wednesday, December 16, the DPT Class of 2022 hosted a surprise Zoom Thank You meeting for the PT Education faculty.

Student Highlight: Student Service Project: Blood Drive

Every year, the Nebraska Student Special Interest Group (NSSIG) of APTA Nebraska holds a PT Day of Service in which PT and PTA students around Nebraska join together to give back to their communities. With everything going on this year, the NSSIG executive team decided that they would need to implement an approach to supporting our communities while still following directed health measures. Leading the effort was the NSSIG president and second-year student, Addi Thonen. Thonen researched and found that what the Nebraska community needed most during this disquieting time in history was blood. The virus outbreak caused a severe blood shortage due to an unprecedented number of blood drive cancellations. Healthy individuals were needed more than ever to donate to help those counting on these lifesaving measures.

In a matter of weeks, Thonen and her peers organized a multi-city blood drive in our state. The ability to serve communities across Nebraska was especially rewarding, according to Thonen. She stated, *"This past year has been hard on everyone, so it meant a lot to me to find an event where we could support each other and show up for our communities while still maintaining everyone's safety."*

The blood drive was well attended by PT and PTA students alike, looking for a way to show compassion during the pandemic. Thonen reflected, *"I was stunned how many people were so willing to donate their time (and blood) to such a worthy cause. As I looked around the room and saw others involved in the simple task of donating blood, I was reminded of the compassion inside all of us. It reminded me of all the healthcare workers in the world that couldn't just stay home when the pandemic hit because people needed their help. Our community is full of people willing to sacrifice their health and safety to care for the lives of strangers. I believe that is extremely admirable, and it made me want to pursue my career even more so that I could continue to help others with the knowledge I have gained throughout my education here at UNMC."*

Faculty Highlight: Retirement of Robert H. Fuchs, PT, MA, ATP



Robert H. Fuchs, PT, MA, ATP, himself a 1984 graduate of the UNMC Physical Therapy Education program, joined the program as an Assistant Professor in 1990. In July, 2006, he was promoted to Associate Professor with tenure. He has contributed to the curriculum in many ways throughout his 30-year tenure and his investment in the program includes serving on the Admissions committee, the Curriculum committee, the Student Success and Performance Evaluation committee, and as the Chair of the Scholarship and Awards committee. In addition, he has been an exemplary model for students. Since 2000, he has served as a faculty advisor for the UNMC SHARING Clinic for under-served, under-insured individuals in the community; attending a clinic four to six times annually. He also served on the SHARING Clinic Faculty Advisory Board from 2014 to 2016.

Professor Fuchs is held in high esteem by his colleagues. Long-time faculty member and former Program Director Dr. Joe Norman stated, *"Bob has been part of the strong foundation upon which this program has thrived over the last 30 years. He is one of the most intelligent, adaptable and humble individuals I have ever met. I will miss him dearly and wish him all the best as he begins his next adventure."* Patricia A. Hageman, PT, PhD, FAPTA, another former program director and long-time faculty member agreed, *"Robert Fuchs (Bob) is truly the 'unsung hero' of the program. Bob makes a difference in the lives of his patients, students, peers, and coworkers by role modeling best professional practice with a caring approach. Ever humble, Bob's outstanding dedication and extensive contributions throughout his career have greatly influenced the program's reputation as one of excellence."*

The Division of Physical Therapy Education is indebted to Professor Fuchs for his service. Future students will also benefit from his work as his legacy lives on through the faculty members who became alumni during his 30-year career at UNMC (Becker, Bills, Christensen, Frazee, Gossman, Sleddens, Venema, Wells, E. Wellsandt, M. Wellsandt).

Faculty Highlight: New Faculty Member Michael D. Rosenthal, PT, DSc, ATC



On January 11, 2021, Michael D. Rosenthal, PT, DSc, ATC, joined the UNMC Division of Physical Therapy Education as an Associate Professor. He is scheduled to coordinate PHYT 509: Human Movement 3 and PHYT 720: Differential Screening for PTs and will assist with the Musculoskeletal courses.

Mike was raised in Alma and Lexington, Nebraska. Following graduation from Doane College, he was commissioned as an officer in the U.S. Navy. He completed a master's degree in physical therapy from the U.S. Army-Baylor University program. Following Navy assignments in Virginia, Maryland, and Florida, he attended the U.S. Military-Baylor University Sports Medicine-Physical Therapy Residency program at West Point, New York, which

culminated in a Doctor of Science degree.

Dr. Rosenthal's subsequent Navy tours included the Naval Special Warfare Center (Coronado, California), SEAL Delivery Vehicle Team 1 (Hawaii), and Naval Medical Center (San Diego, California). Upon retiring from the Navy in 2016, Dr. Rosenthal worked as an Assistant Professor in the School of Exercise and Nutritional Sciences, Doctor of Physical Therapy Program at San Diego State University.

Mike and his wife, Linda – a Colorado native, have five children ages 12 to 22. In their spare time, they enjoy a variety of outdoor activities, kids' sports, and service activities.

Welcome to UNMC, Mike! We're glad you're here.

Faculty Highlight: Research awards earned by Elizabeth Wellsandt, PT, DPT, PhD, OCS



Faculty member Elizabeth Wellsandt, PT, DPT, PhD, OCS, recently earned several prestigious awards. These include:

APTA Early Career Investigator Award in Biomechanics Research

The Early Career Investigator Award in Biomechanics Research was awarded by the APTA's Biomechanics Special Interest Group within the Academy of Physical Therapy Research. This is awarded to an individual nationally recognized as an emerging expert in biomechanics. The award is for a new investigator who has substantial accomplishments over the past one to two years, including grant funding or important contribution to the field, and has demonstrated a history of excellence in scholarship.

UNMC 2021 New Investigator Award

The New Investigator Awards go to outstanding UNMC scientists who in the past two years have secured their first funding from the National Institutes of Health, the Department of Defense or other national sources. Dr. Wellsandt has recently received a two-year R21 grant from the National Institutes of Health and a three-year Investigator Award from the

Rheumatology Research Foundation for her work in post-traumatic osteoarthritis (OA) after anterior cruciate ligament (ACL) injury. New investigators also had to demonstrate scholarly activity such as publishing their research and/or presenting their findings at national conventions.

Please see the scholarly activity section below for more information about Dr. Wellsandt's research.

Faculty Highlight: Bills named to APTA Nebraska Diversity, Equity and Inclusion Committee

Sara Bills, DPT, Assistant Professor and Associate Program Director, has been appointed to the newly formed Diversity, Equity and Inclusion (DEI) Committee for APTA Nebraska. The committee will provide recommendations to the board to advance diversity, equity, and inclusion in our association and profession. *If you are interested in learning more about DEI initiatives in our association or our program, please email sara.bills@unmc.edu.*

Faculty Highlights: 2020 UNMC Faculty Scholarly Activity Listing

Peer-reviewed articles published

- **Becker** BJ, Shope R, Willett GM, Von Essen S, Kennel V. Early Career Physical Therapist Faculty Connecting With Others for Scholarly Activity, *Journal of Physical Therapy Education*: October 27, 2020 - Volume Published Online First - Issue - doi: 10.1097/JTE.000000000000161
- Billings HA, Hall ER, Gas BL, McDonald P, **Becker** BJ, Michael K, Moore PA, Nickol DR. Quality Indicators of IPE Recourses: Creation of a Checklist for Design and Evaluation Using a Modified Delphi Process. *Journal of Interprofessional Education and Practice*. 2020;21, Dec 2020 in print, available online Aug 5, 2020, doi.org/10.1016/j.xjep.2020.100353
- Wang Z, **Chien** JH, **Siu** KC. Stepping over multiple obstacles changes the pattern of foot integrated pressure of the leading and trailing legs. *J Biomech*. 2020 Jan 2;98:109423. doi: 10.1016/j.jbiomech.2019.109423. Epub 2019 Oct 15. PMID: 31653507.
- Eisenhauer C, Silva FB, Yoder AM, Kupzyk KA, Pullen C, Salinas KE, Miller JJ, **Hageman** PA. Mobile technology intervention for weight loss in rural men: protocol for a pilot pragmatic randomized controlled trial. *BMJ Open*. Apr 2020, 10 (4) e035089. doi.org/10.1136/bmjopen-2019-035089
- Kupzyk K, Pozehl B, Pullen CH, **Hageman** PA. Moderating effects of cognitive variables in a rural women's weight loss intervention. doi.org/1016/j.jneb.2020.02.003. *Journal of Nutrition Education and Behavior*. 2020;52(5): 474-482. doi.org/1016/j.jneb.2020.02.003.
- Rodrigues J, Campbell A, Frese E, Lowers S, **Norman** JF, Stackowicz D, Starr J, Walko M. The Current Status of Cardiovascular and Pulmonary Physical Therapy: An Update of the Description of Specialty Practice, *Cardiopulmonary Physical Therapy Journal*, 31(3):94-104, July 2020.
- Ligon C, Seong E, **Schroeder** E, DeKorver N, Yuan L, et al. δ -Catenin engages the autophagy pathway to sculpt the developing dendritic arbor. *J Biol Chem*. 2020; 295(32):10988-11001.
- Armijo P, Huang CK, Tyson PC, Oleynikov D, **Siu** KC. Ergonomics Analysis for Subjective and Objective Fatigue between Laparoscopic and Robotic Surgical Skills Practice among Surgeons. *Surgical Innovation* 2020; 27(1): 81-87.
- Ritter F, Yeh M, Yan Y, **Siu** KC, Oleynikov D. Effects of Varied Surgical Simulation Training Schedules on Motor-Skill Acquisition. *Surgical Innovation* 2020; 27(1): 68-80.
- Chen R, Armijo P, Krause C, **Siu** KC, Oleynikov D. A Comprehensive Review of Robotic Surgery Curriculum and Training for Residents, Fellows, and Postgraduate Surgical Education. *Surgical Endoscopy* 2020; 34(1): 361-367.
- Hu J, Jones AYM, Zhou X, Zhai H, Ngai SPC, **Siu** KC, Dalton M: Assessment of Physiotherapy Practice (Chinese) as a standardized evaluation of professional competency in Chinese physiotherapy students: An observational study. *BMC Medical Education*. 2020; 20(1): 108.
- Fallah Tafti F, Boron JB, **Venema** DM, Kim HJ, Yentes JM. Task specificity impacts dual-task interference in older adults. [published online ahead of print May 6, 2020]. *Aging Clin Exp Res*. doi.org/10.1007/s40520-020-01575-3
- Holden MA; Button K; Collins NJ; Henrotin Y; Hinman RS; Larsen JB; Metcalf B; Master H; Skou ST; Thoma LM; **Wellsandt** E; White DK; Bennell K. Implementation of best practice therapeutic exercise for people with knee and hip osteoarthritis: what does the current evidence base tell us?. *Arthritis care and research : the official journal of the Arthritis Health Professions Association*. 2020; 0893-7524

- Youngwook K; Lee JM; **Wellsandt** E; Rosen A. Comparison of shoulder range of motion, strength, and upper quarter dynamic balance between NCAA division I overhead athletes with and without a history of shoulder injury. *Physical therapy in sport : official journal of the Association of Chartered Physiotherapists in Sports Medicine*. 2020 Mar; Vol. 42: p. 53-60. 1466-853X
- **Wellsandt** E; Khandha A; Capin J; Buchanan TS; Snyder-Mackler L. Operative and nonoperative management of anterior cruciate ligament injury: Differences in gait biomechanics at 5 years. *Journal of orthopaedic research : official publication of the Orthopaedic Research Society*. 2020 Mar; 0736-0266

Books/chapters published:

- **Meyer** KP; Guthmiller JM. 2020. "Managing Managers," in *Management and Leadership Skills for Medical Faculty and Healthcare Executives: A Practical Handbook* 2nd Ed. Editors Viera AJ, Kramer R. Springer, Switzerland.
- **Meyer** K, McBrien S, Winnicki M. 2020. "Case Study – University of Nebraska Medical Center," in *Holistic Admissions: Predicting the Likelihood for Student Success*. Ed. Sandlin, M, Sedlacek, W. American Association of Collegiate Registrars and Admission Officers. Washington, D.C.
- **Norman**, J.: Co-Author, *Challenges and Opportunities in Healthcare Leadership: Voices from the Crowd in Today's Complex and Interprofessional Healthcare Environment*, In Preparation with UNMC HEROES Staff. September 2020.

Active grants:

Becker and Cochran

Improving Student Wellness and Success: An Interprofessional Approach to Exploring Social and Psychological Capital in Allied Health Programs. College of Allied Health Professions Interprofessional Education Grant.

Bilek

Healthy Bones, Healthy Life: Effect of Habitual Physical Activity on Bone and Metabolic Health in Pediatric Cancer Survivors. UNMC Research Support Fund.

Healthy Bones, Healthy Life: Effect of Habitual Physical Activity on Bone and Metabolic Health in Pediatric Cancer Survivors. Pediatric Cancer Research Group Grant.

Feasibility of Bisphosphonate Use on Sleeve Gastrectomy Associated Bone Loss: Health Body, Health Bones Trial. UNMC Research Support Fund.

Feasibility of Bisphosphonate Use on Sleeve Gastrectomy Associated Bone Loss: Health Body, Health Bones Trial. Society of American Gastrointestinal and Endoscopic Surgeons.

Wearable Vibration Device to Prevent Bone Loss in Post-menopausal Women
NIH-NIA SBIR sub-contract with Theranova, LLC.

Bills and Norman

Improving adherence to exercise in rural patients with heart failure: A pilot study comparing HEART Camp Connect to enhanced usual care in rural Nebraska. UNMC CENTRIC (Center for Patient, Family & Community Engagement in Chronic Care Management).

Feasibility and Acceptability of Peer and Coach Support to Promote Adherence to Exercise in Patients with Heart Failure. UNMC CENTRIC (Center for Patient, Family & Community Engagement in Chronic Care Management).

Chien

Mobile Motion Capture System. UNe Tech Omaha Medical Technology Pipeline Grant .

Christensen

New Outcome Measure in Post-Acute Care: Out with FIM - In with Section GG. Office of the Vice Chancellor for Academic Affairs at the University of Nebraska Medical Center.

Cochran and Volkman

Creating Connections: Using Student Tele-Teams to Empower Rural Stroke Survivors. American Heart Association Mission Lifeline Rural Stroke Innovators Grant.

(See also Becker and Cochran above.)

Hageman

Engaging Rural Men with Mobile Technologies for Weight Loss. A Randomized Controlled Trial. Department of Health and Human Services/National Institute of Health/ NINR

Norman

(See Bills and Norman above.)

Siu

Ag-Operator Monitoring Systems (Ag-OMS) for Safety and Health Risk Detection and Assessment. NIOSH/CS-CASH Pilot Grant Program.

Ergonomics of Inguinal Hernia Repairs with Mesh Fixation between Robotic, Laparoscopic and Open Procedures. American Hernia Association.

Efficacy of mHealth for Self-management in People with Parkinson's Disease. UNMC CENTRIC Just-in-Time Grant.

Venema

CAPTURE Falls: Collaboration and Proactive Teamwork Used to Reduce Falls. Nebraska Department of Health and Human Services Division of Public Health Medicare Rural Hospital Flexibility Program.

Interdisciplinary Care Transitions Research Team Development. NU System Science Planning and Proposal Generation Grant, University of Nebraska.

Resiliency, reserve, and fatigability: Insights into fall risk. UNO-UNMC Sciences, Engineering, and Medicine Initiative.

Volkman

(See Cochran and Volkman above.)

Wellsandt, E.

Role of Biomarkers in the Osteoarthritis Pathway After Joint Injury. Rheumatology Research Foundation.

Osteoarthritis After ACL Injury: Establishing Cumulative Joint Loading as A Preventative Target.
Department of Health and Human Services/National Institute of Health/NIAMS

Mobile, Biosensor Technology for Measuring Joint-Level Human Motion. UNL-UNMC Sciences,
Engineering, and Medicine Initiative.

Wellsandt, E. and Wellsandt, M.

Return-To-Sport Testing after ACL Injury: Translation to Clinical Outpatient Care. George
Blanton Grant, Nebraska Foundation for Physical Therapy