

GSU Research Day April 8, 2022

LIVE – ON CAMPUS SESSIONS

Time and Room	Title of Presentation	Abstract	Virtual Participation Link	Student/Faculty Presenter
<p>8:45 – 9:00</p> <p>Engbretson Hall</p> <p><i>15 minutes</i></p>	<p>Introduction to Keynote Speaker</p>	<p>Welcome and Introduction to Keynote Speaker:</p> <p>Dr. Beverly Schneller, Provost and Vice President, Academic Affairs</p> <p>Dr. Cheryl Green, President Governors State University</p>	<p>Link to Virtual Participation</p>	<p>Dr. Colleen Sexton Associate Provost/ Assoc VP Academic Affairs and</p> <p>Dr. Carl Hampton, Chief Diversity Officer</p> <p>Presiders</p>
<p>9:00 – 10:30 AM</p> <p>Engbretson Hall</p> <p><i>90 minutes</i></p>	<p>Strategic STEM DEI Initiatives</p>	<p>Dr. Juan Gilbert is the Andrew Banks Family Preeminence Endowed Professor and Chair of the Computer & Information Science & Engineering Department at the University of Florida, where he leads the Human-Experience Research Lab. Dr. Juan Gilbert is a leading scholar and national leader in creating strategic DEI initiatives to increase the number of historically underrepresented individuals in STEM.</p> <p>Former President Barack Obama selected Dr. Gilbert to receive the Presidential Award of Excellence in Science, Mathematics, and Engineering Mentoring. His efforts have also been recognized by the National Center for Women & Information Technology as one of the inaugural recipients of its annual Undergraduate Research Mentoring Award. Dr. Gilbert’s outstanding mentorship, creation of high-quality research opportunities, recruitment of</p>	<p>Link to Virtual Participation</p>	<p>Dr. Juan Gilbert</p>

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		<p>women and minority students, and efforts to encourage and advance undergraduate students in STEM-related fields set him apart from his peers.</p> <p>At Governors State, Dr. Gilbert will speak to the pedagogies and programs he engages in DEI initiatives that help broaden participation in STEM for people in historically underrepresented groups. He will also speak on effective DEI practices that help recruit, retain, and graduate people from marginalized groups in STEM.</p> <p>Dr. Gilbert, the final speaker in GSU's DEI Distinguished Speaker Series, will provide us with strategies to help increase STEM participation of all demographic groups among our faculty, staff, and students at GSU.</p>		
<p>Poster Session Hall of Governors 10:30 AM - Noon</p>	<p>Characteristics of Invasion Earthworms in North American Hardwood Forests</p>	<p>The earthworm invasion in North American forest has caused negative impacts on species diversity and biological process. However, the nature and extent of the influence of earthworm invasions on structure and function of these forest ecosystems remain largely unknown. This study aimed to assess the abundance, richness, distribution, density, and biomass of earthworms in the Huron Mountains old-growth forests. The results showed over 73% of the examined forest plots were occupied by the earthworm and the abundance of earthworm ranged from 11 to 17 worm/m², with the high earthworm density in Hemlock-Red Pine-Jack Pine forests than in Maple-Aspen-Poplar and Maple-Beech-Birch forests in the study area. The total dry weight of the earthworm was about 0.31, 0.28, and 0.18 g/m² in the Hemlock-Red Pine-Jack Pine, Maple-Beech-Birch, and Maple-Aspen-Poplar forests, respectively. The average length and dry weight of individual juvenile earthworms was quite similar for the three forest types (about 29.5 mm for the length and 0.02 g for the dry weight per earthworm). The dry weight of individual earthworms was tightly related to its length. No relationships were found between litterfall amount on</p>	<p>Live Session Hall of Governors</p>	<p>Madeleine Naliwko – Graduate Student in Biology</p> <p>Quincy Santomieri Undergraduate Student in Biology</p>

Time and Room	Title of Presentation	Abstract	Virtual Participation Link	Student/Faculty Presenter
		forest floor and the density, biomass and length of earthworm in the examined three forest types.		Faculty Sponsors: Dr. Xiaoyong Chen, Professor College of Arts and Sciences (CAS) Dr. Timothy Gsell, Professor CAS Dr. John Yunger, Professor CAS
Poster Session Hall of Governors 10:30 AM - Noon	Soil Aggregation and Associated Soil Organic Carbon in Two Forest Types in the Huron Mountains, Michigan	Soil organic carbon (SOC) is an important indicator of soil quality and health. Soil aggregates provide physical protection for SOC and serves as an important mechanism for carbon Sequestration. In this study, the amount and distribution of SOC pool with soil aggregate-size fractions were investigated in two forest types, Hemlock-Red Pine forests and Maple-Aspen-Poplar forests, in Huron Mountain of Michigan. Results showed the proportions of macro-aggregates (>1 mm, 0.25-1 mm) was higher in Hemlock-Red Pine forests (87.3%) than in Maple-Aspen-Poplar forests (73.7%), suggesting that habitats in Hemlock-Red Pine forests benefited the formation and stability of macro-aggregates and the conditions in Maple-Aspen-Poplar forests facilitated to assemble micro-aggregates. SOC concentration obviously decreased with soil depths in micro-aggregates (0.053-0.25 mm, < 0.053 mm) in both examined forests. In Hemlock-Red Pine forests, macro-aggregates had a higher SOC concentration than micro-aggregates. SOC stocks was higher in Maple-Aspen-Poplar forests (89.79 t/ha) than in Hemlock-Red Pine forests (52.25 t/ha). The proportions of aggregate sizes - associated SOC content were similar in the two forest types.	Live Session Hall of Governors	Dr. Xiaoyong Chen, Professor College of Arts and Sciences (CAS) Dr. Mary E. Carrington Professor CAS

Time and Room	Title of Presentation	Abstract	Virtual Participation Link	Student/Faculty Presenter
<p>Poster Session Hall of Governors 10:30 AM - Noon</p>	<p>I'm at a Loss, But Not for Words: A Multimedia Creation</p>	<p>In my multi-media piece, I utilize vignettes—micro essays—alongside photographs as an attempt to dig into that single moment in time and to share stories surrounding one’s connection their roots in a post-COVID-19 world. After two years of socially distancing, masking up, and little-to-no physical touch, the physical aspect of human connection remains a touchy subject, and we are left questioning where we stand with others who we once were physically close to. For myself, the pandemic had forced me to socially distance myself from my grandfather, who I lived 79 steps away from. Reflecting on this fragility of this moment, I am pushed to also think of those who I have lost in my life and those who I hope to be my future. With vignette #3 holding a special place in my heart as the inspiration for this series, I utilize these four vignettes to expand on each digitally photographed moment to complete the unspoken stories on where I come from and who I see in my future. As a published undergraduate English student and a self-taught freelance photographer and graphic designer, I invite my audience to interpret each as a separate entity and then see where these mediums intertwine— what can one say louder than the others?</p>	<p>Live Session Hall of Governors</p>	<p>Rachel Beckmann Honors Student College of Arts and Sciences (CAS)</p> <p>Faculty Sponsors: Dr. David Rhea Honors Program Director</p> <p>Laura White Faculty Member College of Arts and Sciences</p>
LUNCH BREAK				
<p>1:00 – 2:00 PM D34000 <i>50 minutes</i></p>	<p>Current Issues in Organization and Governance in Higher Education: Perspectives of Emerging Scholars.</p>	<p>Higher education is one of the oldest institutions in the United States as the first college was founded even before the country gained independence. It has evolved throughout its history and over 17 million students are currently enrolled in over 6,000 colleges and universities across the country. Given the complexity of the current social and political landscape in which higher education operates, it is imperative to examine current issues impacting the organization and governance of colleges and universities. This panel consists of emerging scholars from the Higher Education Administration concentration of the Interdisciplinary Leadership Doctoral Program as they discuss their</p>	<p>Live Session D34000</p>	<p>Amy Bala, University Lecturer - College of Health and Human Services and Doctoral Student in</p>

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		<p>proposed research related to leadership, faculty and administration, and equity issues in organization and governance.</p>		<p>Interdisciplinary Leadership, COE Megan Chaffee, Associate Director of Financial Aid and Doctoral Student in Interdisciplinary Leadership, COE Novalla Coleman Academic Advisor and Doctoral Student in Interdisciplinary Leadership, COE Anna Jannak Doctoral Student in Interdisciplinary Leadership, COE Faculty Sponsor: Dr. Matthew Cooney, Assistant</p>

Time and Room	Title of Presentation	Abstract	Virtual Participation Link	Student/Faculty Presenter
				Professor College of Education
Poster Session Hall of Governors 1:00 PM – 3:00 PM	I Don't Belong Here	<p>Inspired by Spike Lee and the movie "Brother Future," "I Don't Belong here" is a two-dimensional/three-dimensional artwork that shows the history America is built upon: slavery and oppression. "I Don't Belong Here" consists of an African-American young woman who goes back in time to slavery and is being chased by police officers.</p>	Live Session Hall of Governors	Kaylin Richey Undergraduate Student College of Education Faculty Sponsor: Dr. David Rhea Honors Program

PHYSICAL THERAPY DOCTORAL STUDENTS
Poster Presentations – Hall of Governors – Friday April 8, 2022

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p style="text-align: center;">Poster Session Hall of Governors 1:00 – 3:00 PM</p>	<p style="text-align: center;">Impact of a Flexibility and Strengthening Program for a Patient with Multiple Sclerosis and Chronic Low Back Pain</p>	<p>Joint osteoarthritis is a common degenerative condition that many aging individuals experience. Anatomic total shoulder arthroplasty (TSA) is an accepted surgical intervention to treat progressive conditions of the glenohumeral joint in aging individuals. The use of TSA has steadily been increasing over the years to treat degenerative joint disease in the glenohumeral joint. While TSA is an option for improving patient function when suffering from glenohumeral osteoarthritis, obesity has been found to negatively impact functional outcomes in individuals undergoing TSA. The purpose of this case report is to describe the physical therapy management and outcomes following eight weeks of traditional outpatient physical therapy therapeutic for an obese 60-year-old male after a left TSA was performed. Many individuals that attend physical therapy hope to fully recover from total shoulder arthroplasty and therapeutic interventions has shown to improve patient’s function.</p>	<p style="text-align: center;">Hall of Governors</p>	<p style="text-align: center;">John Dier PT Doctoral Student</p> <p style="text-align: center;">Faculty Sponsor: Dr. Scott Getsoian Assistant Professor</p> <p style="text-align: center;">College of Health and Human Services</p>
<p style="text-align: center;">Poster Session Hall of Governors 1:00 – 3:00 PM</p>	<p style="text-align: center;">The Effects of Serial Casting on Children with Toe Walking: A Scoping Review</p>	<p>The literature supports the use of serial casting as an effective intervention for toe walking. This intervention resulted in increased benefits when used in conjunction with co-interventions and should be considered by clinicians when treating children with toe walking while factoring in the severity of the patient’s toe walking and ankle ROM.</p>	<p style="text-align: center;">Hall of Governors</p>	<p style="text-align: center;">Grace Garcia PT Doctoral Student</p> <p style="text-align: center;">Brittany Gibbs PT Doctoral Student</p> <p style="text-align: center;">Faculty Sponsor: Dr. Mary Jones Assistant Professor</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
				College of Health and Human Services
Poster Session Hall of Governors 1:00 – 3:00 PM	The Role of Education in an Older Patient With Low Back Pain Following a Lumbar Laminectomy: A Retrospective Case Report	Background and purpose: Low back pain is a common injury that impacts people from overuse of trunk flexion or who maintain sitting posture for extended periods of time. Case description: This retrospective case report details a 58-year-old male who reported low back pain with a differential diagnosis of lumbar laminectomy. Initially, the patient had 6 weeks of physical therapy but had more visits approved because he used poor body mechanics when lifting an object from the ground. Outcomes: Range of motion (ROM), Manual muscle testing (MMT), and FOTO outcome measures measured changes in motion and function. His FOTO score improved from 45/100 to 53/100 in 2 weeks. The lumbar ROM also improved. Discussion: The patient’s lumbar mobility and function improved with the implementation of skilled PT interventions. It cannot be determined if the interventions were the only reason for the improvement because it is not known what the patient did outside of the treatment session.	Hall of Governors	Vincent Lai PT Doctoral Student Faculty Sponsor: Dr. Roberta K. O’Shea Professor College of Health and Human Services
Poster Session Hall of Governors 1:00 – 3:00 PM	Effectiveness of Physical Therapy Interventions for a Patient 4 Weeks Post Partial Meniscectomy: A Retrospective Case Report	Meniscal tears are one of the most common knee injuries, with about 500,000 cases per year in the United States alone. When a tear is limiting a patient’s functional mobility, the meniscal tissue can be removed. There are two procedures to remove the meniscal tissue following a tear, a total or partial meniscectomy. For a total meniscectomy, the entire meniscus is removed, and for an arthroscopic partial meniscectomy (APM), the surgeon removes as little meniscal tissue as possible, such as unstable meniscal fragments, while the remaining edges are smoothed over. According to research by Peterson and colleagues the removal of the meniscal tissue after an injury may lead to osteoarthritis within 10 to 20 years after the procedure. In addition, Starke and	Hall of Governors	Jonathan Sydlowski PT Doctoral Student Faculty Sponsors: Dr. Scott Getsoian Assistant Professor

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		<p>colleagues reported that meniscal tissue from patients 40 years of age or older have less cellularity and a decreased healing response in their meniscal tissue than tissue from younger patients. A randomized control trail by Gauffin et al, demonstrated that arthroscopic surgery provided better pain relief compared with nonoperative treatment at a 1-year follow-up in patients with meniscal pathology. Following meniscal surgery, ROM and strength are important in return to a patient’s prior level of function.</p>		<p>Dr. Renee Theiss Associate Professor Julie Tuweig Adjunct Faculty Member College of Health and Human Services</p>
<p>Poster Session Hall of Governors 1:00 – 3:00 PM</p>	<p>Importance of Early Intervention for Vision and Motor Development for a Complex Pediatric Patient with Hydrocyphalus and Right Esotropia</p>	<p>Background and Purpose: The importance of early intervention has been explored in the literature, as has the importance of interdisciplinary care. Background and Purpose: The importance of early intervention has been explored in the literature, as has the importance of interdisciplinary care, but the combination of these two factors in developing an intervention plan for a complex child have not been fully explored.</p> <p>Case Description: This case report followed a 19-month-old Caucasian male with hydrocephalus, a complex medical background, and compounding factors involving his parents to explore how his early intervention team’s involvement and communication allowed for improved outcomes and greater carry over between sessions.</p> <p>Outcomes: This report utilized the PDMS-2 and observations from the different disciplines, including physical, occupational, speech, vision, nutrition, and developmental, to see improvements made over an 8-week period.</p>	<p>Hall of Governors</p>	<p>Jamie Vetterli PT Doctoral Student Faculty Sponsor: Dr. Mary Jones Assistant Professor College of Health and Human Services</p>
<p>Poster Session</p>	<p>Significant Improvements in the Safety, Mobility, and</p>	<p>Recurrent falls in older adults is dangerous and increasing in prevalence. This is especially significant for those with increased fall risk like the population with chronic neurological conditions. The purpose of this case report is to</p>	<p>Hall of Governors</p>	<p>Aaron Fullerton PT Doctoral Student</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Hall of Governors</p> <p>4:00 – 6:00 PM</p>	<p>Quality of Life Can be Made with Education and Strengthening Interventions for Patients with Chronic Neurological Conditions</p>	<p>investigate the impact strengthening interventions have on patients with chronic spinal cord injury in an effort to decrease fall risk and improve quality of life. Recurrent falls in older adults is dangerous and increasing in prevalence. This is especially significant for those with increased fall risk like the population with chronic neurological conditions. The purpose of this case report is to investigate the impact strengthening interventions have on patients with chronic spinal cord injury in an effort to decrease fall risk and improve quality of life.</p>		<p>Faculty Sponsors: Dr. Renee Theiss Associate Professor Dr. Jessica Corbus Assistant Professor</p> <p>College of Health and Human Services</p>
<p>Poster Session</p> <p>Hall of Governors</p> <p>4:00 – 6:00 PM</p>	<p>Strengthening the Gluteus Medius and Minimus May be Effective in Improving Chronic Pain and Lower Extremity Disability in Patients with Medial and Lateral UKA and Trendelenberg Gait</p>	<p>Knee replacement surgery is the most performed inpatient procedure in the geriatric population in the United States with over a million knee replacements performed annually.</p> <p>Partial Knee replacement (PKR), also known as uni-compartmental knee arthroplasty (UKA) is a localized and specific alternative to a total knee replacement in patients with limited osteoarthritis affecting only specific segments of the knee. Although patients whom have undergone partial knee replacements enjoy successful outcomes, revision surgery is more often warranted in this population than patients whom have undergone total knee replacement.² Post-operative rehabilitation of total or partial knee replacement surgeries should thus crucially incorporate interventions addressing pelvic stability in the frontal plane as instability and weakness of the hip abductors may contribute to excessive medial-lateral moments of the knee during dynamic single leg stance activities, contributing to knee pain</p>	<p>Hall of Governors</p>	<p>Mohammed Mahmoud PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Renee Theiss Associate Professor Jane Borghammer Adjunct Faculty Member</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
				College of Health and Human Services
Poster Session Hall of Governors 4:00 – 6:00 PM	<p>Compound Movements Requiring Large Amounts of Oxygen Consumption and Manual Treatment Shown n=Beneficial in Outpatient Treatment of Post-Acute Sequelae of SARS-COV-2</p>	<p>The growing number of people who contracted Covid and are now being considered post-acute sequelae of SARS-CoV-2 infection (PASC) or Covid long haulers is alarming. Symptoms include fatigue, dyspnea, cough, chest tightness, difficulty concentrating, headache, and general joint pain. There has been little research in regards to the physical therapy management of this patient population. The purpose of this case report is to provide a framework on treating individuals with PASC in the outpatient physical therapy setting.</p>	Hall of Governors	<p>Matthew McTague PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Renee Theiss Associate Professor</p> <p>College of Health and Human Services</p>
Poster Session Hall of Governors 4:00 – 6:00 PM	<p>Effectiveness of Physical Therapy Management for Severe Bilateral Adhesive Capsulitis: A Retrospective Case Report</p>	<p>The purpose of this case study was to examine the outcomes of conservative physical therapy management for a 50-year-old male with a severe case of bilateral adhesive capsulitis in order to further understand the effectiveness of treatment on functional outcomes for individuals with concurrent hypothyroidism.</p>	Hall of Governors	<p>Marin McElroy PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Scott Getsoian Assistant Professor</p> <p>College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>The Effects of a Conservative Shoulder Rehabilitation for an Individual with Chronic Spinal Cord Injury and Persistent Shoulder Pain: A Retrospective Case Report</p>	<p>Nearly one out of three individuals with a spinal cord injury (SCI) will experience shoulder pain at some point in their lives. This pain can be especially debilitating due to the increased use of the upper extremities for mobility, transfers, and pressure relief. Due to this reliance on the upper extremities, conservative interventions for persistent shoulder pain may be favored over surgical interventions. The purpose of this case report is to describe the outcomes of a 6-week physical therapy (PT) treatment plan for an individual with chronic SCI who had been experiencing persistent shoulder pain.</p>	<p>Hall of Governors</p>	<p>Steven Paul PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Mary Jones Assistant Professor</p> <p>Dr. Renee Theiss Associate Professor</p> <p>Patricia O'Brien Adjunct Faculty Member</p> <p>College of Health and Human Services</p>
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Effectiveness of Physical Activity and Whole-Body Vibration Treatment Interventions for a Pediatric Patient with Type III Spinal Muscle Atrophy: A</p>	<p>Spinal muscle atrophy (SMA) is a condition relating to the progressive loss of motor function. The purpose of this retrospective case report is to examine the outcomes of physical therapy interventions through implementation of a four-week whole-body vibration (WBV) protocol in combination with physical activity to maintain strength and preserve motor function in a child.</p>	<p>Hall of Governors</p>	<p>Alexandra Rubi PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Roberta K. O'Shea Professor</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
	Retrospective Case Study			Dr. Russell Carter Faculty Emeritus College of Health and Human Services
Poster Session Hall of Governors 4:00 – 6:00 PM	Physical Therapy Management of a Geriatric Patient with Multiple Hip Dislocations and Revision Surgeries in the Skilled Nursing Setting: A Retrospective Case Report	Add physical therapy perspective on how to evaluate, manage, and treat geriatric patients who have had multiple hip dislocations and subsequent multiple revisions to the same hip within the SNF setting.	Hall of Governors	Clare Kramer PT Doctoral Student Faculty Sponsors: Dr. Roberta K. O'Shea Professor Alex Linko Adjunct Faculty Member College of Health and Human Services
Poster Session Hall of Governors 4:00 – 6:00 PM	Effectiveness of an Abridged Injury Reduction Program in Collegiate Soccer Players: A Prospective Study	Thornborg et al 2017: Performing FIFA11+ results in injuries for all lower extremity areas being reduced by 39% (hamstring 60%, hip and groin 41%, knee 48%, and ankle 32%). Soligard et al 2010, Steffen et al 2013: FIFA11+ must be completed 2+x/week to yield the outcomes above. Bizzini et al 2013, Bizzini et al 2015: The follow barriers to meeting the required frequency of performance exists: compliance, space, time.	Hall of Governors	Cody Bornemann PT Doctoral Student Michal Kuczek PT Doctoral Student

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
				Faculty Sponsor: Dr. Scott Getsoian Assistant Professor College of Health and Human Services
Poster Session Hall of Governors 4:00 – 6:00 PM	Hip Endurance Exercises to Improve Walking Ability and Low Back Pain: A Retrospective Case Report	There is a high prevalence of patients with low back pain in the United States. The purpose of this case report is to examine the implementation of a physical therapy plan of care that focuses on improving hip muscular endurance to determine its effect on a patient with low back pain.	Hall of Governors	Tyler Siebert PT Doctoral Student Faculty Sponsors: Dr. Scott Getsoian Assistant Professor Kimberly Smith Adjunct Faculty Member College of Health and Human Services
Poster Session Hall of Governors	Postoperative Rehabilitation Following Posterior Lumbar Fusion at L4-L5 with	Radiculopathy post lumbar fusion is a prevalent diagnosis that is treated by physical therapists. The range of symptoms produced by the pinched nerve root within the spinal column can impair tolerance of tasks related to daily and occupational activities. Therefore, the purpose of this retrospective case report is to determine the impact of physical therapy on improving functional activity	Hall of Governors	Atra Warda PT Doctoral Student Faculty Sponsor: Dr. Mary Jones

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
4:00 – 6:00 PM	Radiculopathy: A Retrospective Case Report	tolerance and participation in a 38-year-old patient status post L4-L5 posterior lumbar fusion with radiculopathy.		Assistant Professor College of Health and Human Services
Poster Session Hall of Governors 4:00 – 6:00 PM	Utilization of the McKenzie system of Mechanical Diagnosis and Treatment (MDT) for Shoulder Pain - A Retrospective Case Report	<p>Background and Purpose: MDT is a method used to classify impairment and directional preference to guide exercise intervention. Rotator cuff tears can have a detrimental effect on a person’s livelihood and ability to perform daily activities and participate in extracurricular activities. This case study is a way to demonstrate how MDT can assist the clinician with diagnosis and exercise prescription.</p> <p>Case Description: LS is a middle-aged male with a medical diagnosis of a left rotator cuff tear resulting in pain which limits his ability to sleep, reach overhead, and perform ADLs.</p> <p>Outcomes: Six weeks of physical therapy intervention consisting of left shoulder IR direction preference, strengthening, ROM, and functional exercise resulted in LS meeting most of his goals. He regained his strength and ability to sleep throughout the night, reach overhead, and dress his upper body without pain. He almost met his ROM goals for shoulder flexion and abduction, but fully met his shoulder IR and ER ROM goals.</p> <p>Discussion: Rotator cuff tears can limit a person’s ability to perform daily activities and participate in their extracurricular activities. Utilization of the MDT method can provide a direction in which to prescribe treatment. Adherence to an exercise regimen is the key to recovery.</p>	Hall of Governors	Alicia Carpenter PT Doctoral Student Faculty Sponsors: Dr. Roberta K. O’Shea Professor Vincent Gutierrez Adjunct Faculty Member College of Health and Human Services

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Physical therapy interventions in a 40-Year-Old Female with Acute Left Shoulder Traction Injury: A Retrospective Case Report</p>	<p>To investigate the effectiveness of conservative treatments to address pain and functional limitations of a 40-year-old female with acute L shoulder injury; whether patient’s L shoulder symptoms were primarily due to musculoskeletal injury, traumatic nerve injury or other factors.</p> <p>To investigate the effectiveness of conservative treatments to address pain and functional limitations of a 40-year-old female with acute L shoulder injury; whether patient’s L shoulder symptoms were primarily due to musculoskeletal injury, traumatic nerve injury or other factors.</p>	<p>Hall of Governors</p>	<p>Sauralben Bhatt PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Roberta K. O’Shea Professor Patricia O’Brien Adjunct Faculty Member College of Health and Human Services</p>
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Effectiveness of Gastric-Soleus Complex Stretching in the Treatment of Plantar Fasciitis: A Retrospective Case Report</p>	<p>Introduction/Objective: Describe how including stretches targeted for the calf muscles positively influenced plantar fasciitis (PF) symptoms and overall functional ability in a 75-year old male who was seen in outpatient physical therapy for PF</p>	<p>Hall of Governors</p>	<p>Victoria A Buffone PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Scott Getsoian Assistant Professor College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Amplitude Movement Training and Physical Therapy Interventions on the Balance, Gait, and Return to Work of a Person with Early Parkinson’s Symptoms: A Retrospective Interventional Report</p>	<p>To explore the effectiveness of a large amplitude movement training program and conservative physical therapy interventions on the balance, gait, and return to work of a person with early PD symptoms through an eight-week episode of care.</p>	<p>Hall of Governors</p>	<p>Shaban Beiram PT Doctoral Student Faculty Sponsor: Dr. Mary Jones Assistant Professor College of Health and Human Services</p>
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Effectiveness of Medial Patellofemoral Ligament Reconstruction Protocol for a 14-year-old Male: A Retrospective Case Report</p>	<p>Objective: To investigate the four phases of the MPFL reconstruction protocol to distinguish if the goals, outcomes, and length of each phase were appropriate and achievable status post MPFL reconstruction surgery. Background: In 90% of adolescent patellar dislocations, the medial patellofemoral ligament (MPFL), the primary stabilizer and most crucial ligament of the patella, is affected. Patellar dislocations are most common in adolescents aged 10 to 17 who are active. Current research suggests that in most cases of patellar dislocations, the MPFL is disrupted and does not return to its previous level of tension. An individual may try conservative treatment, but the re-dislocation rate after an MPFL tear is estimated to be 15-44%. Surgical techniques for MPFL reconstruction include use of a graft, which uses different tissues such as the adductor magnus, quadriceps tendon, semitendinosus, or a synthetic mesh ligament. After a patient undergoes MPFL reconstruction, the goals of rehabilitation will focus on protection for healing, mobility, ROM, full weight bearing (WB), strength, proprioception, and return to sport.</p>	<p>Hall of Governors</p>	<p>Emily Carstens PT Doctoral Student Faculty Sponsors: Dr. Scott Getsoian Assistant Professor Anne Rockert Adjunct Faculty Member</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
				College of Health and Human Services
Poster Session Hall of Governors 4:00 – 6:00 PM	Clinical Presentation of Shoulder Injury Related to Vaccine Administration (SIRVA): A Retrospective Case Report	<p>Background & Purpose: Adhesive capsulitis is a commonly seen diagnosis in physical therapy practice. A newer diagnosis known as SIRVA presents similarly to adhesive capsulitis or muscle tear and presents itself after an injection. The purpose of this study is to present the findings associated with a patient with SIRVA and the course of action taken by the physical therapy team for her plan of care. The thought process of the physical therapy team to present a physical therapy diagnosis that is not consistent with adhesive capsulitis.</p> <p>Case Description: This is a retrospective case report that follows a 60-year-old female that presents with a primary diagnosis of adhesive capsulitis. She had a significant prior medical history of anxiety and MS.</p> <p>Outcomes: The patient was seen for an MRI after her initial evaluation for physical therapy. The findings were significant for major trauma to the shoulder musculature and supporting structures and was referred to an orthopedic doctor for surgical interventions.</p> <p>Discussion: Physical therapists are an important members of the health care team and can help patients determine if they will benefit from physical therapy or if other interventions will be needed.</p>	Hall of Governors	Kristin Catalano PT Doctoral Student Faculty Sponsors: Dr. Scott Getsoian Assistant Professor Dr. Mary Jones Assistant Professor College of Health and Human Services
Poster Session	Effectiveness of Inpatient Rehabilitation on	COVID-19 is a pathological process first identified in Wuhan, Hubei Province, China in December of 2019. Clinically, it presents with symptoms including but not limited to: fever, dry cough, dyspnea, myalgia, fatigue, and radiographic evidence of pneumonia. It may lead to long-term dysfunctions including: pulmonary, neurological, physical capacity, muscle strength, and	Hall of Governors	Kimberly Hayes PT Doctoral Student

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Hall of Governors</p> <p>4:00 – 6:00 PM</p>	<p>Patients with COVID-19: A Scoping Review</p>	<p>psychological/cognitive impairments. Many patients were admitted to inpatient rehabilitation facilities to reduce the risk of further decline and promote return to prior level of functions and safe discharge home.</p>		<p>Kaylene Kolpak PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Mary Jones Assistant Professor</p> <p>College of Health and Human Services</p>
<p>Poster Session</p> <p>Hall of Governors</p> <p>4:00 – 6:00 PM</p>	<p>Use of Auditory Cues and its Impact on Upper Extremity Function Post Stroke: A Scoping Review</p>	<p>Stroke is one of the most common causes of acquired disability, with limited positive outcomes for those affected in the upper extremity. The purpose of this review is to showcase the results and implications of using auditory cues as an adjunct to physical therapy when focusing on rehabilitation of the upper extremities. Google scholar was searched and a total of 12 papers were reviewed, only including those that compared melodic, rhythmic, or other auditory cues as intervention in the context of the upper extremity. The current literature discussed did not find statistically significant differences between conventional therapy and therapy using auditory stimulation as an adjunct. Future studies should try to narrow the parameters of using auditory cues to find out what aspects of it are capable of enhancing outcomes, if at all.</p>	<p>Hall of Governors</p>	<p>Richard Mohar PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Mary Jones Assistant Professor</p> <p>College of Health and Human Services</p>
<p>Poster Session</p> <p>Hall of Governors</p>	<p>Comparing Sitting Pressure Between Two Commercially Available Cushions on</p>	<p>Shower chairs come in several different shapes and sizes and there is currently no standard way to objectively justify the increased cost of customizable appropriate shower chairs. Persons with impaired mobility and sensation take upwards of 1-4 hours to shower and toilet and are susceptible to pressure injuries. The cost of pressure injury (PI) prevention is high and currently</p>		<p>Andrea Bultema PT Doctoral Student</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>4:00 – 6:00 PM</p>	<p>a MSCC: Phase I Methodology</p>	<p>treating pressure injuries is costing the US 11billion dollars a year annually. This study objectively measured the sitting pressures of able-bodied individuals on 2 cushions in an upright position and 2 tilted positions. Additionally, the arm rests and footrest heights were manipulated. Although this study is in Phase I, the results indicate a statistically significant difference in pressure distribution when comparing the VEF interface in combination with tilt-in-space mechanics to standard interfaces. It can be inferred that these two components on a MSCC may be effective in the prevention of PI’s by significantly decreasing pressure on weight bearing anatomical structures.</p>		<p>Steven Moon PT Doctoral Student Faculty Sponsor: Dr. Roberta K. O’Shea Professor College of Health and Human Services</p>
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>PT Management of a Patient with PD using Boxing: A Case Report</p>	<p>Background and Purpose: Parkinson’s Disease is a neurological condition that affects the direct pathways of the basal ganglia of the brain. This condition is prevalent in people 65-80 years of age. Common complaints include balance deficits, increased risk of falls, reduced endurance, and bradykinesia. The purpose of this case report is to investigate the effects of boxing as an intervention for Parkinson’s Disease.</p> <p>Case description: The patient is a 73-year-old white male diagnosed with Parkinson’s Disease. He has been in physical therapy for the past 3 months and is taking medication as part of his interventions. The patient has no other comorbidities other than arthritis, left total knee replacement, asthma, and high blood pressure.</p> <p>Outcomes: The Berg Balance Scale, Timed Up and Go Test, and 6 Minute walk test were used to assess change in balance, fall risk, and endurance. The patient improved from a 44 to 54 on the berg balance scale, 8 seconds to 7 seconds on the timed up and go test and scored 165m for the 6-minute walk test.</p>	<p>Hall of Governors</p>	<p>Beritn Jaimes, Jr. PT Doctoral Student Faculty Sponsor: Dr. Mary Jones Assistant Professor Eileen Johnson Adjunct Faculty Member College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
		<p>Discussion: Based on the findings, boxing improved the areas of concern for the patient. Improvement can be defined as improving scores or maintaining scores because Parkinson’s Disease is a progressive condition. More research should be conducted with focus on proper dosing, routine, and with more accuracy.</p>		
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Acute Inpatient Physical Therapy Rehabilitation for a Patient with Orthopedic Injury Post Alcohol Withdrawal Seizure: A Retrospective Case Report</p>	<p>Alcohol withdrawal syndrome (AWS) is a commonly experienced condition in the acute care setting and has physical impacts on patient’s functional mobility and physical status. The purpose of this case report is to explore how physical therapy can best address AWS-associated impairments.</p> <p>Case Description: The patient, KH, was a 63-year-old male who was admitted to the hospital following seizures caused by AWS. Following a five day stay in the critical care unit (CCU), KH received imaging which revealed he had a total rotator cuff tear. KH then presented to physical therapy in the acute inpatient setting where he was evaluated and received five sessions of physical therapy during his inpatient stay. The physical therapy plan of care consisted of strengthening, balance interventions, gait training interventions, and functional mobility training.</p> <p>Outcomes: As determined by the Numeric Pain Rating Scale (NPRS), KH demonstrated no significant decrease in pain over the course of his stay. KH initially required minimal assistance with sit-stand transfers and moderate assistance with supine-sit bed mobility. By the end of his stay, KH only required supervision for both sit-stand transfers and for supine-sit bed mobility. KH’s initial activity measure for post-acute care (AM-PAC) mobility score was 17 and it increased to 21 by discharge, indicating significant improvement.</p> <p>Conclusion: Transfer training, gait training interventions, and functional mobility training contributed to improved outcomes in the present case study of a patient with AWS and a total rotator cuff tear.</p>		<p>Brittany Hancock-Brown PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Roberta K. O’Shea Professor</p> <p>College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Physical therapy Treatment Of a Non-Surgical Bimalleolar Ankle Fracture: A Retrospective Case Report</p>	<p>Background/Purpose: Ankle fractures are becoming more frequent in the aging adult patient population. Depending on the severity of the fracture, surgical fixation may be required; diagnostic imaging can aid the decision process for invasive or conservative treatments of ankle fractures. There is a lack of standardized physical therapy protocols to follow for non-surgical bimalleolar fractures and therefore the purpose of this retrospective case report is to describe the examination, interventions, and outcomes of physical therapy treatment.</p> <p>Case Description: The patient was a 49-year-old male who experienced a left bimalleolar ankle fracture that followed a crush injury. The patient did not require surgical repair due to the severity determined by the diagnostic imaging performed in the emergency department. The patient was immobilized in a cast for six weeks, followed by three weeks in a CAM boot. The patient began physical therapy intervention 39 days after the injury. The following interventions were utilized: manual therapy techniques, dry needling, cupping, therapeutic exercise and activity, and neuromuscular re-education.</p> <p>Outcomes: The lower extremity functional scale (LEFS) was used to assess the patient’s level of function. The patient’s score was 33 at the time of the initial physical therapy evaluation and improved to 80 by discharge from physical therapy. The patient’s pain in the left ankle was abolished by the 8th visit. The left ankle presented with decreased range of motion and strength, compared to the unimpaired side, at the first physical therapy visit and made quick improvements leading to an early discharge. The patient also demonstrated improved functional movements with no compensations at the end of the patient’s plan of care.</p> <p>Discussion: Improvements were seen across all measurements which supports the use of conservative treatment approach and the use of exercises that focused on strength, balance, and proprioception to assist in returning patients</p>	<p>Hall of Governors</p>	<p>Krystal Kofoed PT Doctoral Student Faculty Sponsor: Dr. Roberta K. O’Shea Professor College of Health and Human Services</p>

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		<p>to their prior level of function. The patient did go against the physical therapist's recommendations for the timeframe of returning to previous high-impact activities. This resulted in increased pain following the activity. Additional studies should be performed to assess the effect of patient's compliance to physical therapists' recommendation following a bi-malleolar fracture.</p>		
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Strengthening and Balance Interventions for a Client Seeking Weight Loss with Undisclosed Neurological Impairments: A Retrospective Case Report</p>	<p>Case Description: The patient was a 46-year-old African American female who presented to skilled outpatient physical therapy seeking to manage her weight in order to improve symptoms related to knee osteoarthritis. After initial evaluation, the patient revealed that she was recently diagnosed with cerebellar atrophy due to complications from alcohol use disorder and previous gastric bypass surgery.</p> <p>Outcome: The Dynamic Gait Index, Activities Balance Confidence Scale, and other functional measures were used to assess patient progress. The patient demonstrated an improvement with some testing, most significantly in dynamic stability, balance confidence, and symptom reduction in both knee pain and dizziness.</p> <p>Discussion: Implementation of a strength and balance protocol may be effective on weight management and symptoms associated with knee osteoarthritis and cerebellar ataxia. However, long term benefits of this protocol are unknown due to the brevity of the study. It remains clear that a patient-centered approach is necessary to achieve individual goals.</p>	<p>Hall of Governors</p>	<p>Lauren Fleming PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Renee D. Theiss Associate Professor</p> <p>Kathleen Getsoian Adjunct Faculty Member</p> <p>Dr. Maryleen Jones Assistant Professor</p> <p>College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>ICF Framework Based Acute Rehabilitation Physical Therapy Decision Making for a Patient with COVID-19: A Retrospective Case Report</p>	<p>Background and Purpose: The COVID-19 virus has taken countless lives in the United States and a plethora of short and long-term medical complications associated with the virus exist. The International Classification of Functioning, Disability, and Health is a universally accepted classification system that was used in this case report to organize and address the patient’s functional impairments. The patient was uninsured, with limited financial and social support resources, thus the rehabilitation team had multifactorial considerations to develop the safest and most effective discharge plan.</p> <p>Case Description: The patient was a 37-year-old Hispanic male who lived a sedentary lifestyle and worked as a meal preparation aide in a kitchen. The patient arrived at the emergency room with complaints of shortness of breath, low oxygen saturation levels, and cyanotic skin changes indicating acute respiratory distress syndrome associated with COVID-19 requiring mechanical ventilation.</p> <p>Interventions and Outcomes: After successful ventilator weaning, the patient was admitted to the inpatient rehabilitation unit and participated in multidisciplinary therapy. Physical therapy treatment during inpatient rehab included progressive therapeutic exercise, functional mobility training, balance, and gait training. Patient education was emphasized to improve psychosocial factors and functional independence. The patient was able to significantly improve in all outcomes, which included the IRF-PAI, functional mobility, NPRS, and manual muscle testing. The patient’s progress resulted in a safe discharge to home.</p> <p>Discussion: This retrospective case report demonstrates how physical therapy interventions embedded in a multidisciplinary team can impact a patient’s impairments secondary to COVID-19. The rehabilitation team’s consideration of the patients’ contextual aspects of both personal and environmental factors</p>	<p>Hall of Governors</p>	<p>Joshua Schien PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Roberta K. O’Shea Professor</p> <p>Dr. Mary Jones Assistant Professor</p> <p>College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
		<p>were essential aspects of the plan of care that supported the patient's safe return to home.</p>		
<p>Poster Session Hall of Governors 4:00 – 6:00 PM</p>	<p>Utilization of the HOAC II Framework for Physical Therapy Management of a Patient with a T1 SCI and Multiple Fractures.</p>	<p>Background and Purpose: Spinal cord injury (SCI) is a life-long condition which can negatively impact the health and well-being of affected individuals. The Hypothesis-Oriented Algorithm for Clinicians II (HOAC II) is an algorithm designed to aid clinicians in decision making and executing various elements of a patient’s plan of care. The purpose of this case report is to provide an example of the application of the HOAC II framework for the management of a patient with chronic SCI who sustained multiple musculoskeletal injuries during a vehicle versus wheelchair user pedestrian accident.</p> <p>Case Description: The patient subject of this case report was a 39-year-old male who experienced a spinal stroke 9 years prior to being involved in a motor vehicle versus wheelchair user pedestrian accident. The client acquired subsequent musculoskeletal and integumentary injuries which negatively impacted his functional mobility abilities, ability to work, and quality of life. The HOAC -II was utilized to address patient identified problems as well as non-patient identified problems in order to formulate an optimal plan of care to improve the patient’s level of function.</p> <p>Outcomes: Functional improvements were measured using the Neuro Recovery Scale, modified Functional Reach, and hip and knee Range of Motion. Quality of Life was measured using the Quality of Life Index – Spinal Cord Injury version.</p> <p>Discussion- The HOAC-II framework provided a proactive framework for the physical therapist to use for decision making regarding seating and positioning to address the musculoskeletal injuries that compromised the patient’s integumentary system and could have significantly impaired the patient’s healing process.</p>	<p>Hall of Governors</p>	<p>Olayemi Olabamiji PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Mary Jones Assistant Professor</p> <p>College of Health and Human Services</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
<p>Poster Session</p> <p>Hall of Governors</p> <p>4:00 – 6:00 PM</p>	<p>Impact of a Flexibility and Strengthening Program for a Patient with Multiple Sclerosis and Chronic Low Back Pain</p>	<p>Background and Purpose: Chronic low back pain is the most common form of disability across the country, with up to 70% of people experiencing an episode at some point in their lives. This case study addresses the utilization of a focused strength and flexibility approach to improving functional outcomes in a patient with chronic low back pain and multiple sclerosis during an episode of physical therapy care.</p> <p>Case Description: Review of a fifty-two-year-old Caucasian female who was referred to outpatient physical therapy to address limitations consisting of low back pain, radicular symptoms, and fatigue associated with multiple sclerosis. The primary goal of treatment was to restore the patient to her prior level of function, reduce pain, and allow the patient to return to work.</p> <p>Outcomes: Functional improvements were measured using range of motion, manual muscle testing, response to repeated directional preference movements, the Oswestry Low Back Pain Disability Questionnaire, the 30 second chair stand test, and neurodynamic special tests.</p> <p>Discussion: The patient experienced improvements across all objective domains after nine weeks of physical therapy intervention. However, at the conclusion of this episode of care, she still experienced difficulty with prolonged standing and walking which negatively impacted work. Based on the patient’s progress, she is expected to continue to see improvements in her low back and radicular symptoms.</p>	<p>Hall of Governors</p>	<p>Denis O’Callaghan PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Mary Jones Assistant Professor</p> <p>College of Health and Human Services</p>
<p>Virtual Poster Session</p>	<p>Acute Inpatient Physical Therapy Rehabilitation for a Patient with Orthopedic Injury Post Alcohol Withdrawal Seizure:</p>	<p>Alcohol withdrawal syndrome (AWS) is a commonly experienced condition in the acute care setting and has physical impacts on patient’s functional mobility and physical status. The purpose of this case report is to explore how physical therapy can best address AWS-associated impairments.</p> <p>Case Description: The patient, KH, was a 63-year-old male who was admitted to the hospital following seizures caused by AWS. Following a five day stay in the</p>	<p>Link to Virtual Presentation</p>	<p>Brittany Hancock-Brown PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Robbie</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
	A Retrospective Case Report	<p>critical care unit (CCU), KH received imaging which revealed he had a total rotator cuff tear. KH then presented to physical therapy in the acute inpatient setting where he was evaluated and received five sessions of physical therapy during his inpatient stay. The physical therapy plan of care consisted of strengthening, balance interventions, gait training interventions, and functional mobility training.</p> <p>Outcomes: As determined by the Numeric Pain Rating Scale (NPRS), KH demonstrated no significant decrease in pain over the course of his stay. KH initially required minimal assistance with sit-stand transfers and moderate assistance with supine-sit bed mobility. By the end of his stay, KH only required supervision for both sit-stand transfers and for supine-sit bed mobility. KH's initial activity measure for post-acute care (AM-PAC) mobility score was 17 and it increased to 21 by discharge, indicating significant improvement.</p> <p>Conclusion: Transfer training, gait training interventions, and functional mobility training contributed to improved outcomes in the present case study of a patient with AWS and a total rotator cuff tear.</p>		<p>O'Shea Professor</p> <p>College of Health and Human Services</p>
Virtual Poster Session	Clinical Presentation of Shoulder Injury Related to Vaccine Administration (SIRVA): A Retrospective Case Report	<p>Background & Purpose: Adhesive capsulitis is a commonly seen diagnosis in physical therapy practice. A newer diagnosis known as SIRVA presents similarly to adhesive capsulitis or muscle tear and presents itself after an injection. The purpose of this study is to present the findings associated with a patient with SIRVA and the course of action taken by the physical therapy team for her plan of care. The thought process of the physical therapy team to present a physical therapy diagnosis that is not consistent with adhesive capsulitis</p> <p>Case Description: This is a retrospective case report that follows a 60-year-old female that presents with a primary diagnosis of adhesive capsulitis. She had a significant prior medical history of anxiety and MS.</p> <p>Outcomes: The patient was seen for an MRI after her initial evaluation for physical therapy. The findings were significant for major trauma to the shoulder musculature and supporting structures and was referred to an</p>	<p>Link to Virtual Presentation</p>	<p>Kristen Catalano PT Doctoral Student</p> <p>Faculty Sponsors: Dr. Scott Getsoian Assistant Professor</p> <p>Dr. Mary Jones Assistant Professor</p>

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		<p>orthopedic doctor for surgical interventions.</p> <p>Discussion: Physical therapists are an important members of the health care team and can help patients determine if they will benefit from physical therapy or if other interventions will be needed.</p>		College of Health and Human Services
Virtual Poster Session	Effectiveness of Gastroc-Soleus Complex Stretching in the Treatment of Plantar Fasciitis: A Retrospective Case Report	Introduction/Objective: Describe how including stretches targeted for the calf muscles positively influenced plantar fasciitis (PF) symptoms and overall functional ability in a 75-year-old male who was seen in outpatient physical therapy for PF.	Link to Virtual Presentation	<p>Victoria A. Buffone PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Scott Getsoian Assistant Professor</p> <p>College of Health and Human Services</p>
Virtual Poster Session	Physical Therapy Interventions in a 40-Year-Old Female with Acute Left Shoulder Traction Injury: A Retrospective Case Report	To investigate the effectiveness of conservative treatments to address pain and functional limitations of a 40-year-old female with acute L shoulder injury; whether patient's L shoulder symptoms were primarily due to musculoskeletal injury, traumatic neve injury or other factors. To investigate the effectiveness of conservative treatments to address pain and functional limitations of a 40-year-old female with acute L shoulder injury; whether patient's L shoulder symptoms were primarily due to musculoskeletal injury, traumatic neve injury or other factors.	Link to Virtual Presentation	<p>Saural Bhatt PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Robbie O'Shea Professor</p> <p>Patricia O'Brien Adjunct Faculty Member</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
				College of Health and Human Services
Virtual Poster Session	Postoperative Rehabilitation Following Posterior Lumbar Fusion at L4-L5 with Radiculopathy: A Retrospective Case Report	Radiculopathy post lumbar fusion is a prevalent diagnosis that is treated by physical therapists. The range of symptoms produced by the pinched nerve root within the spinal column can impair tolerance of tasks related to daily and occupational activities. Therefore, the purpose of this retrospective case report is to determine the impact of physical therapy on improving functional activity tolerance and participation in a 38-year-old patient status post L4-L5 posterior lumbar fusion with radiculopathy.	Link to Virtual Presentation	Atra Warda PT Doctoral Student Faculty Sponsor: Dr. Mary Jones Assistant Professor College of Health and Human Services
Virtual Poster Session	PT Management of a Patient with PD Using Boxing: A Case Report	<p>Background and Purpose: Parkinson’s Disease is a neurological condition that affects the direct pathways of the basal ganglia of the brain. This condition is prevalent in people 65-80 years of age. Common complaints include balance deficits, increased risk of falls, reduced endurance, and bradykinesia. The purpose of this case report is to investigate the effects of boxing as an intervention for Parkinson’s Disease.</p> <p>Case description: The patient is a 73-year-old white male diagnosed with Parkinson’s Disease. He has been in physical therapy for the past 3 months and is taking medication as part of his interventions. The patient has no other comorbidities other than arthritis, left total knee replacement, asthma, and high blood pressure.</p> <p>Outcomes: The Berg Balance Scale, Timed Up and Go Test, and 6 Minute walk test were used to assess change in balance, fall risk, and endurance. The patient improved from a 44 to 54 on the berg balance scale, 8 seconds to 7</p>	Link to Virtual Presentation	Bertin Jaimes, Jr. PT Doctoral Student Faculty Sponsor: Dr. Mary Jones Assistant Professor Eileen Johnson Adjunct Faculty Member College of Health and Human Services

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		<p>seconds on the timed up and go test and scored 165m for the 6-minute walk test.</p> <p>Discussion: Based on the findings, boxing improved the areas of concern for the patient. Improvement can be defined as improving scores or maintaining scores because Parkinson’s Disease is a progressive condition. More research should be conducted with focus on proper dosing, routine, and with more accuracy.</p>		
<p>Virtual Poster Session</p>	<p>The Effects of a Conservative Shoulder Rehabilitation for an Individual with Chronic Spinal Cord Injury and Persistent Shoulder Pain: A Retrospective Case Report</p>	<p>Nearly one out of three individuals with a spinal cord injury (SCI) will experience shoulder pain at some point in their lives. This pain can be especially debilitating due to the increased use of the upper extremities for mobility, transfers, and pressure relief. Due to this reliance on the upper extremities, conservative interventions for persistent shoulder pain may be favored over surgical interventions. The purpose of this case report is to describe the outcomes of a 6-week physical therapy (PT) treatment plan for an individual with chronic SCI who had been experiencing persistent shoulder pain.</p>	<p>Link to Virtual Presentation</p>	<p>Steven Paul PT Doctoral Student</p> <p>Faculty Sponsor: Dr. Mary Jones Assistant Professor</p> <p>Dr. Renee Theiss Associate Professor</p> <p>Patricia O’Brien Adjunct Faculty Member</p> <p>College of Health and Human Services</p>
<p>Virtual Poster Session</p>	<p>Utilization of the McKenzie System of Mechanical Diagnosis and Treatment (MDT) for Shoulder Pain - A</p>	<p>Background and Purpose: MDT is a method used to classify impairment and directional preference to guide exercise intervention. Rotator cuff tears can have a detrimental effect on a person’s livelihood and ability to perform daily</p>	<p>Link to Virtual Presentation</p>	<p>Alicia Carpenter PT Doctoral Student</p>

Time	Title of Presentation	Abstract	Place	Student/Faculty Presenter
	Retrospective Case Report	<p>activities and participate in extracurricular activities. This case study is a way to demonstrate how MDT can assist the clinician with diagnosis and exercise prescription.</p> <p>Case Description: LS is a middle-aged male with a medical diagnosis of a left rotator cuff tear resulting in pain which limits his ability to sleep, reach overhead, and perform ADLs.</p> <p>Outcomes: Six weeks of physical therapy intervention consisting of left shoulder IR direction preference, strengthening, ROM, and functional exercise resulted in LS meeting most of his goals. He regained his strength and ability to sleep throughout the night, reach overhead, and dress his upper body without pain. He almost met his ROM goals for shoulder flexion and abduction, but fully met his shoulder IR and ER ROM goals.</p> <p>Discussion: Rotator cuff tears can limit a person's ability to perform daily activities and participate in their extracurricular activities. Utilization of the MDT method can provide a direction in which to prescribe treatment.</p> <p>Adherence to an exercise regimen is the key to recovery.</p>		<p>Faculty Sponsor: Dr. Robbie O'Shea Professor</p> <p>Vincent Gutierrez Adjunct Faculty Member</p> <p>College of Health and Human Services</p>