

UNIVERSITY OF MEMPHIS

2025 Rural Health Care Pathways Expansion (RHCPE) Grant

PROJECT TITLE: FOSTERING RURAL PHYSICAL THERAPY CAREERS IN WEST TENNESSEE

Lead Entity & Fiscal Agent: University of Memphis (Lambuth Campus, Jackson, TN)

IN PARTNERSHIP WITH:

School Districts:


Dyer County Schools
Dyersburg City Schools
Tipton County Schools


Employer Partners:

Dyersburg Health
Lift Therapy, Inc.
STAR Physical Therapy

Project Director:

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\$1,647,458

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FOSTERING RURAL PHYSICAL THERAPY CAREERS IN WEST TENNESSEE

TABLE OF CONTENTS

Abstract.....	iii
Section 1: Program Narrative.....	1
Section 2: Demonstration of Need.....	2
Section 3: Program Plan.....	5
Section 4: Strength of Partnership.....	12
Section 5: Budget Plan.....	14
Section 6: Sustainability.....	14
Appendices.....	16
<i>Appendix A – Memorandum of Understanding</i>	16
<i>Appendix B – Budget</i>	22

ABSTRACT/PROJECT SUMMARY

Tennessee is currently facing a significant shortage of physical therapists, particularly in rural West Tennessee, where local healthcare systems struggle to fill physical therapy positions. According to U.S. Census Bureau data (July 2023), the state has one of the lowest per capita numbers of physical therapists in the nation. This shortage is compounded by the high demand for physical therapists, with job openings expected to increase by 14% nationwide from 2023 to 2033 (Bureau of Labor Statistics). To address this critical workforce gap, the proposed Physical Therapy Pathway Program seeks to introduce secondary education students to the physical therapy profession through a comprehensive, career-based education model. The program will offer a blend of clinical internships, work-based learning experiences, dual enrollment coursework, and industry certifications to support students' progression toward careers in physical therapy.

Key components of the program include: 1) the development of dual enrollment Anatomy and Physiology courses, in addition to Career and Technical Education (CTE) courses in the discipline of physical therapy, in partnership with local high schools in rural West Tennessee, 2) the creation of clinical internships and work-based learning opportunities with local healthcare providers such as Lift Therapy, Dyersburg Health, and STAR Physical Therapy (note: this will also involve the development of physical therapy simulation experiences for high school students, to gain a better understanding of the clinical skills used in the profession of physical therapy), and 3) providing student stipends for the *Certified Physical Therapist Aide* industry certification for participating students. This initiative will not only provide early exposure to physical therapy careers for students in Dyer and Tipton counties but will also enable them to gain valuable clinical experience and earn industry certifications that will support their entry into future post-secondary physical therapy education programs and professional roles.

The program aims to produce highly skilled physical therapist aides to assist current practitioners, while preparing students for future advanced education and careers in physical therapy. The proposed pathway program will directly contribute to the recruitment and retention of physical therapists in rural West Tennessee, helping to address a long-standing healthcare workforce shortage. Ultimately, this project will help to create a sustainable pipeline of qualified physical therapy professionals by providing secondary students with the knowledge, skills, experience, and certifications needed to enter the workforce and pursue advanced physical therapy education.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

SECTION 1: PROGRAM NARRATIVE

According to U.S. Census Bureau data from July 2023, Tennessee has one of the lowest numbers of physical therapists to serve their population Per Capita in the nation. (Bureau of Labor Statistics, Employment May 2023 and U.S. Census Bureau, Population July 2023). The proposed physical therapy pathway program aims to address this physical therapist shortage by introducing the profession to secondary education students through career-based education, clinical internships and/or work-based learning, industry certifications, and dual enrollment offerings for application to physical therapy education programs. This project blends multiple strategies in an effort to maximize impact on the physical therapy workforce in West Tennessee by 1) developing a pathway program with **dual enrollment** Anatomy and Physiology courses and documented articulation agreements with three healthcare employers located in rural counties in West Tennessee (Lift Therapy, Inc., Dyersburg Health, and STAR Physical Therapy), 2) developing meaningful **work-based learning experiences** to offer experiential learning for high school students (inclusive of high tech simulation experiences) and 3) providing **student stipends** for enrolled students to prepare and sit for the *Certified Physical Therapist Aide* industry certification. The rural counties of Tipton and Dyer counties will also benefit from this pathway programming by early immersion of secondary education students into local, rural physical therapy clinical settings. Exposure to the physical therapy profession in these rural settings can provide students with a meaningful start on the path to becoming a physical therapist.

This physical therapy pathway program will provide students the opportunity to complete health sciences coursework with an emphasis on the practice of physical therapy at the level of a physical therapy technician or aide, while completing dual enrollment coursework, such as Human Anatomy and Physiology I and II, which are prerequisite courses for application for

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

entry-level Doctor of Physical Therapy education programs located in Tennessee. Through the Career and Technical Education (CTE) Health Sciences coursework, students may prepare for and sit for the industry certification, *Certified Physical Therapist Aide*, offered by the American Medical Certification Association. Outcomes of this proposed Physical Therapy pathway include industry certification (*Certified Physical Therapist Aide*), clinical exposure by means of clinical internship and/or work-based learning, and college credit for successful completion of dual enrollment Anatomy and Physiology I & II (BIOL 2010 and 2020), in addition to the co-requisite lab courses (BIOL 2011 and 2021). Moreover, students completing the four CTE courses may receive dual enrollment credit or Experiential Learning Credit, which can be applied towards an undergraduate college degree at the University of Memphis.

SECTION 2: DEMONSTRATION OF NEED

It is documented in the *THEC Academic Supply and Occupational Demand Report* that the largest industry in Tennessee by 2030 will be healthcare and social assistance. National, state, and regional data sources indicate current and future physical therapy workforce needs as shown in the table below.

Location	Current Open PT Jobs	Sources
National	259,200 jobs; 14% projected growth 2023-33	U.S. Bureau of Labor Statistics
State	1.00 candidates available per job opening (698 openings)	Jobs4TN - TN.Gov Occupation Profile Supply and Demand (accessed January 28, 2025)
Regional	187 open PT positions (rank 9 th of the highest number of job openings in West Region, TN)	Jobs4TN - TN.Gov Occupation Profile Supply and Demand (accessed January 28, 2025)

Based on the *THEC Academic Supply and Occupational Demand Report*, the physical therapy workforce is classified as in demand in Tennessee (page 69). Within this report, no

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

physical therapy career pathway is noted for the Career and Technical Education (CTE) Health Sciences concentrations for 2021-2022. The *U.S. Bureau of Labor Statistics Occupational Outlook Handbook* posts that the employment of physical therapists is projected to grow 14 percent from 2023 to 2033, much faster than the average for all occupations. Current physical therapy positions in rural West Tennessee continue to go unfilled due to shortage of applicants as posted on *CareerOnestop.org* for rural counties in West Tennessee, including Dyer and Tipton counties. About 13,600 openings for physical therapists nationally are projected each year, on average, over the decade (*U.S. Bureau of Labor and Statistics*). Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. Ten-year (2022-2032) projected growth of average annual job openings for physical therapist aides (11% growth), physical therapist assistants (39.4% growth), and physical therapists (24.0% growth) demonstrates a continued need for additional individuals to be trained as physical therapy clinicians (*U.S. Bureau of Labor Statistics*).

With seven Doctor of Physical Therapy (DPT) programs in the state of Tennessee (approximately 168 total graduates annually), only 68% of graduates (approximately 114) stay to work in TN following graduation (Jobs4TN - TN.Gov Occupation Profile Supply and Demand, accessed January 28, 2025). Of the seven DPT programs, only one program resides in West Tennessee, the University of Tennessee Health Science Center. With the development of the University of Memphis Lambuth Doctor of Physical Therapy program and its mission to emphasize rural-based healthcare, participation in this grant project would serve to mitigate this physical therapy workforce need in West Tennessee by increasing awareness, exposure, and education of physical therapy for secondary-level students in rural high school settings (strategy 1). This project would serve to directly address the workforce shortage by adding entry-level

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

physical therapist aides (strategies 2 and 3) to the workforce to support the current physical therapists in practice and prepare these physical therapist aides for graduate physical therapy education by the acceleration of prerequisite coursework via dual enrollment credits and the attainment of clinical observation hours, which are required for admissions in a Doctor of Physical Therapy program.

This grant proposes the development of a physical therapy career pathway program (two new courses will developed, as indicated below) to address the physical therapy workforce need. This program would consist of a Career and Technical Education (CTE) pathway focusing on health sciences, specifically as it relates to physical therapy/rehabilitation services. The pathway program would incorporate a step-wise progression of four secondary-level courses: Health Sciences, Medical Therapeutics, Physical Therapy Careers, and Clinical Internship—the latter two of which will be developed in conjunction with UML DPT faculty. Students would be offered the opportunity to prepare for and sit for the *Certified Physical Therapist Aide* exam while enrolled in the Physical Therapy Careers course. Once certified, students would be able to work as physical therapist aides in local, rural clinics during the Clinical Internship course via employer partner clinics. In addition to the physical therapy career pathway, eligible physical therapy career pathways students would be encouraged to enroll and complete the A&P I and II dual enrollment courses, which will accelerate their preparation for future application to a graduate physical therapy education program (DPT program).

Additional equipment, classroom/lab renovations, and personnel would be required to support these grant activities. Equipment is needed to allow students to familiarize themselves with and practice clinical skills routinely used in a physical therapy setting. Renovations are requested by CTE directors at the proposed high schools (Tipton County, Dyer County, and

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Dyersburg City High Schools), to establish a dedicated space for clinical skills practice and a mock physical therapy clinic environment necessary for experiential learning.

SECTION 3: PROGRAM PLAN

As mentioned in Section 1, this project focuses on the implementation of three strategies to maximize the impact on the physical therapy profession in West Tennessee; that is 1) to create dual enrollment courses (Anatomy & Physiology (A&P) I and II with labs), in addition to CTE courses in the discipline of physical therapy, 2) to develop collaborative, meaningful, and structured work-based learning (WBL) experiences in the physical therapy setting for students at the secondary level (inclusive of high tech simulation experiences), and 3) to provide student stipends for the Physical Therapist Aide certification exam for students enrolled in the physical therapy career pathway program for secondary level students in five rural West Tennessee high schools located in Dyer and Tipton counties. Per the *THEC Academic Supply and Occupational Demand Report*, the physical therapy workforce is classified as in demand in Tennessee. If this grant were funded, outcomes would positively impact the admissions for physical therapist assistant programs and graduate physical therapy education programs required to become a licensed physical therapist, significantly expanding the physical therapy workforce in rural West Tennessee.

Overview

The physical therapy career pathway program will serve secondary students interested in pursuing a career in the physical therapy field. This program combines both A&P dual enrollment credit and clinical skills training using on-site instructors and advanced equipment to allow for a better understanding of physical therapy clinical practice. In addition, the coursework

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

in the CTE physical therapy career pathway program will allow students to obtain the necessary knowledge and practical skills needed to sit for the *Certified Physical Therapist Aide* exam.

Physical Therapy Career information

Per the *U.S. Bureau of Labor*, employment of physical therapists is projected to grow 14 percent from 2023 to 2033, much faster than the average for all occupations. Employment is widely available in various outpatient clinics, hospitals, nursing homes, and schools. The physical therapy profession is comprised of three distinct roles: physical therapist (PT), physical therapist assistant (PTA), and physical therapist aide. PTs are licensed in the state and hold a doctoral degree in physical therapy from an accredited DPT program. Physical therapists have autonomous practice in the state of Tennessee. Physical therapist assistants (PTAs) are also licensed in the state and hold an associate's degree in physical therapy. Physical therapist assistants work under the supervision of physical therapists. Physical therapist aides are not licensed in the state and thus serve as support staff for PTs and PTAs. College credit through dual enrollment or Experiential Learning Credit can be awarded for dual-enrollment courses and can be applied to 4-year undergraduate degree programs in the health science concentration of choice. Students enrolled in the physical therapy career pathway program may be eligible to sit for the *Certified Physical Therapist Aide* certification to begin working in the physical therapy field as a high school student under the supervision of PTs and PTAs.

Dual Enrollment Eligibility

Admission requirements for the high school-based dual-enrollment program are as follows: 19 composite score on the ACT, 18 English sub-score for students taking English Composition, 18 math sub-score for students taking College Algebra; and 15 math sub-score for students taking Probability/Statistics coursework, and 100 admissions index score, which is 30

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

times the high school GPA (based on a 4.0 scale) plus the composite ACT score. For example, a high school GPA of a 2.85 X 30 = 85.5 + 19 = 104.5.

Curriculum

The physical therapy career pathway will consist of the high school courses and activities listed below:

- Dual Enrollment Courses
 - BIOL 2010/2011 – Anatomy and Physiology I (with lab) – 4 credit hours
 - BIOL 2020/2021 – Anatomy and Physiology II (with lab) – 4 credit hours
- CTE Health Sciences – Physical Therapy Career Pathway (dual enrollment or Experiential Learning Credit may be applied for the four courses below)
 - Health Sciences Course
 - Medical Therapeutics Course
 - Physical Therapy Career Course (Certified PT Aide exam and work-based learning)*
 - Clinical Internship Course (work-based learning)*

*Note: These are new courses to be developed by the UML DPT faculty, to allow for the creation of the Physical Therapy Career Pathway through CTE

DPT faculty at the University of Memphis Lambuth (UML) and CTE instructors at the partnering secondary schools will collaborate on curriculum development to ensure that physical therapy pathway program students are receiving the essential content necessary to serve as a physical therapist aide in the clinic setting and serve as an immediate asset for clinicians (PTs and PTAs) working at local healthcare organizations. Multiple work-based learning activities will be embedded in the physical therapy pathway program, as shown in the MOU (Appendix

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

A). Work-based learning experiences will include field trips to the clinics for job shadowing and other clinic-related activities, as well as to the UML campus to participate in case-based physical therapy simulation scenarios with simulated patients. Simulation-based learning experiences bridge the gap between classroom learning and clinical practice by providing students with a safe and controlled learning environment to practice skills, leading to improved decision-making, enhanced confidence, and the ability to refine skills following mistakes. Based on experiential and constructivist learning theory, simulation-based learning experiences can be recorded and reviewed for self-reflection and performance modification, ultimately contributing to rich learning and skill retention. This simulation training will prove highly valuable as it provides hands-on practice that is often limited in the real-clinic setting while working as a physical therapist aide, as time and liability are often barriers.

Grant Meetings

The project director and principal investigator (J. Bradford) will be responsible for meeting 100% of all stated grant goals and commitments, with the assistance of key personnel including, three co-investigators, a dual enrollment coordinator, a simulation coordinator, and a project coordinator (collectively, the grant committee). Quarterly grant meetings will be scheduled upon grant acceptance and will be led by the project director and all responsible persons listed on the grant will attend. The grant committee will be responsible for providing strategic guidance by evaluating progress toward the grant objectives, proposing changes or additions to action steps to ensure progress toward the grant objectives, including proactively planning for the sustainability of the physical therapy pathway program and dual enrollment courses once the grant ends. Grant objectives, action items, and timeline are presented in the tables below.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Objective 1: Serve up to 300 dual enrollment students in the physical therapy career pathway over the next 48 months in Tipton County, Dyer County, and Dyersburg City High Schools.

Action Step 1	Identify dual enrollment instructors within the UofM system and secondary schools.
Action Step 2	Develop dual enrollment courses within partnering high schools.
Action Step 3	Recruit eligible high school students.
Action Step 4	Support dual enrollment implementation via the purchase of supplies, capital equipment, and salaries.

Objective 2: Develop the Physical Therapy Career Pathway Program in Tipton County, Dyer County, and Dyersburg City High Schools to support the expansion of the physical therapy workforce over the next 4 years.

Action Step 1	Identify and train instructors to teach in the physical therapy career pathway program courses.
Action Step 2	Design and implement facility renovations at the 5 secondary schools to prepare for the physical therapy career course skills lab.
Action Step 3	Recruit high school students.
Action Step 4	Purchase supplies and capital equipment.
Action Step 5	Train instructors on use of capital equipment (BodyViz and simulation A/V software).
Action Step 6	Develop and offer 5 work-based learning experiences per year of the grant through collaboration with all partners.
Action Step 7	Offer the Certified Physical Therapist Exam within the CTE - Physical Therapy Career Course.

Objective 3: Collaborate with employer clinics in rural Tipton and Dyer counties to provide enrolled physical therapy pathway students with hands-on, experiential learning and patient care immersion.

Action Step 1	Establish a quarterly meeting schedule for the duration of the grant term for clinical partners, including employer partners. Meetings will resume annually after the grant term ends.
Action Step 2	Work with employer partners to offer five work-based learning (WBL) experiences within the physical therapy clinical setting per year, per school (5 schools total). WBL experiences may include field trips, job shadowing, mock interviews, simulations within DPT labs at UML, mentorship, and clinical internships.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Action Step 3	Set up transportation for work-based learning experiences.
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Objective 4: Achieve 100% completion of grant commitments throughout the four-year grant period ending in Fall 2029.

Action Step 1	Create and distribute promotional handouts for program recruitment.
Action Step 2	Meet and evaluate the grant progress quarterly.
Action Step 3	Submit all quarterly reports.
Action Step 4	Recruit high school students.
Action Step 5	Submit final report.

Timeline:

Task	Responsible Person(s)/Party	Objective/Action Step	Budget Alignment
Fall 2025-Spring 2026 Quarters: Development			
Identify dual enrollment instructors within the UofM system and secondary schools.	Project Director; CTE Directors; Superintendents	1/1	Lines 1,2
Develop dual enrollment courses within partnering high schools.	Project Director; CTE Directors; Superintendents	1/2	Lines 1,2
Recruit high school students.	CTE Directors; Superintendents	1/3, 2/3, 4/4	Line 10
Support dual enrollment implementation via the purchase of supplies, capital equipment, and salaries.	Project Director; CTE Directors; Superintendents	1/4	Lines 1,5, 19
Identify and train instructors to teach in the physical therapy career pathway program courses.	Project Director; CTE Directors; Superintendents	2/1	Lines 1, 2
Design and implement facility renovations at the 5 secondary schools to prepare for the physical therapy career course skills lab.	Project Director; CTE Directors	2/2	Line 19
Purchase supplies and capital equipment.	Project Director; CTE Directors	2/4	Line 19
Train instructors on use of capital equipment (BodyViz and simulation A/V software).	Project Director; CTE Directors	2/5	Line 19

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Develop and offer work-based learning experiences per year of the grant through collaboration with all partners.	Project Director; CTE Directors; Employer Partners	2/6	Line 11
Establish a quarterly meeting schedule for the duration for the grant term for clinical partners, including employer partners. Meetings will resume annually after grant term ends.	Project Director; CTE Directors; Employer Partners	3/1	
Create and distribute promotional handouts for program recruitment.	Project Director; CTE Directors	4/1	Line 10
Meet and evaluate the grant progress quarterly.	Project Director; CTE Directors; Superintendents, Employer Partners	4/2	
Submit all quarterly reports.	Project Director	4/3	
Summer 2026-Spring 2029 Quarters: Implementation			
Develop and offer work-based learning experiences per year of the grant through collaboration with all partners.	Project Director; CTE Directors; Employer Partners	2/6	Line 11
Recruit high school students.	CTE Directors; Superintendents	1/3, 2/3, 4/4	Line 10
Offer the Certified Physical Therapist Exam within the CTE - Physical Therapy Career Course.	CTE Directors	2/7	Line 5
Work with employer partners to offer work-based learning experiences within the physical therapy clinical setting per year per school (5). WBL experiences may include field trips, job shadowing, mock interviews, simulations, mentorship, and clinical internships.	Project Director; CTE Directors; Employer Partners	2/6, 3/2	Line 11
Set up transportation for work-based learning experiences.	Project Director; CTE Directors	3/3	Line 11
Create and distribute promotional handouts for program recruitment.	Project Director; CTE Directors	4/1	Line 10
Meet and evaluate the grant progress quarterly.	Project Director; CTE Directors; Superintendents, Employer Partners	4/2	

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Submit all quarterly reports.	Project Director	4/3	
Summer 2029 Quarter: Final Reporting and Program Continuation			
Submit final report.	Project Director	4/5	
Meet and evaluate the physical therapy pathway program annually.	Project Director; CTE Directors; Superintendents, Employer Partners	4/2	

SECTION 4: STRENGTH OF PARTNERSHIP

This grant project will be carried out by three important partner groups including: The University of Memphis Lambuth (UML), secondary education/CTE partners, and employer partners as delineated in the Memorandum of Understanding (Appendix A). UML will act as the Lead Entity for this project, with Dr. Jacque Bradford serving as the project director. Dr. Bradford will have the responsibility of managing grant administration, conducting required reporting, and facilitating communication between the multiple grant partners. With the help of key personnel support, Dr. Bradford will guarantee that the grant timeline and activities are carried out per this grant proposal. Dr. Bradford has effectively managed many projects over her professional career as Program Director, Director of Clinical Education, and Chairperson of a variety of committees. Dr. Myra Meekins will serve as a health sciences and physical therapy curriculum co-director, and Dr. Rachel Humphrey will serve as a clinical education co-director to assist with communication with our clinical employer partners. Courtney Orians will support this grant through her role and expertise serving as the University of Memphis Director of Dual Enrollment. The UofM Dean of the College of Health Sciences, Dr. Rick Bloomer, will support this grant with his extensive experience effectively securing and managing multiple grant projects (~70 funded projects as principal investigator), in addition to his administrative experience working with multiple school systems and healthcare entities. A simulation

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

coordinator will be identified to support the extensive simulation-based learning experiences that students will be exposed to throughout the grant term. Finally, a project coordinator will be identified to assist with the day-to-day logistics of this work. None of the above personnel will be FTE but rather, a percent effort based on the needed work.

The CTE professionals possess extensive experience in effectively developing and delivering quality CTE programs that effectively address health sciences career requirements. The current faculty members involved in this proposal are highly knowledgeable professionals in their respective fields, having extensive experience in both teaching and in health care clinical practice. Lead CTE Directors for the secondary schools include Harvey Witherington with Tipton County Schools, Amy Hester with Dyer County Schools, and Kim Yeiter with Dyersburg City Schools.

Additional strength of this partnership comes from the employer partners and the sheer need for assistance in the physical therapy workforce in West Tennessee. LeAnn Childress, Director of Outpatient Therapy Services for Lift Therapy, Inc. and Dyersburg Health, and Ross Maldonado, Partner with STAR Physical Therapy, will serve as our lead employer contacts for this grant. Both individuals are administrative leaders within their respective companies and have been long-time supporters of physical therapy clinical education in Tennessee.

This project is crucial to support the physical therapy practice in the rural counties of Dyer and Tipton in West Tennessee, as it will aid in narrowing the employment gap identified by key workforce metrics in these areas, increase physical therapy career exposure and experience to hundreds of secondary education students Tipton and Dyer counties over the grant term, and will promote the post-secondary school enrollment of these students interested in a future career as a licensed PT or PTA. Without efforts like this, the patients who PTs and PTAs serve, our

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

loved ones in rural, West Tennessee, will continue to experience a challenge with receiving the timely physical therapy service they require and deserve. The UML's mission, experience, and partnerships are well-aligned to attain the proposed grant outcomes.

SECTION 5: BUDGET PLAN

The budget plan is presented in Appendix B. Detailed information is provided to show how each expenditure ties to the goals of the grant proposal in the Section 3 Program Plan Timeline.

SECTION 6: SUSTAINABILITY

We are confident this project will be sustainable in the future for several reasons. Dual enrollment classes are already established in the secondary schools where the career pathway program will be hosted for participants to attend; however, the dual enrollment courses of Anatomy & Physiology I and II with labs are not currently taught at the Tipton County, Dyer County, and Dyersburg City schools, which will be an expansion in the dual enrollment offerings at these schools. The newly developed physical therapy career pathway program supplies and capital equipment purchased with initial grant funds will ensure the curriculum's execution and continued implementation beyond the grant term. We have established mutually beneficial relationships with our rural community school districts and employer partners to achieve project outcomes. In addition, the UML DPT program will generate funds through the admissions of physical therapy students and from the support of future alumni. Through these relationships, we expect to obtain continued funding to support student stipends beyond the grant period and for maintenance and repair of equipment used in this project. Finally, we will have DPT students and faculty who can assist with the execution of the pathway program, delivering course content to

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

avoid the need to pay adjunct instructors. This not only reduces program delivery costs but also contributes to the UML DPT program's mission to engage with the community and improve rural health care.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

APPENDIX A: MEMORANDUM OF UNDERSTANDING

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**MEMORANDUM OF UNDERSTANDING AND
GRANT AGREEMENT BETWEEN
THE UNIVERSITY OF MEMPHIS (Lead Entity and Fiscal Agent)**

AND

**PHYSICAL THERAPY CAREER PATHWAY PARTNERS-
EMPLOYERS:**

**LIFT THERAPY, INC., DYERBURG HEALTH,
STAR PHYSICAL THERAPY,**

AND

TENNESSEE SECONDARY SCHOOLS:

**TIPTON COUNTY SCHOOLS,
DYER COUNTY SCHOOLS, AND
DYERSBURG CITY SCHOOLS**

This Memorandum of Understanding and Educational Grant Agreement (hereinafter, "Agreement") is effective on the last date of the last signature by the authorized representatives of all parties (hereinafter, the "Effective Date"), under the laws of the United States of America, by and between The University of Memphis (hereinafter, "University"), located at 315 Administration Building, Memphis, TN USA 38152, and the Physical Therapy Career Pathway Partners, including Lift Therapy, Inc., Dyersburg Health, Tennessee Secondary Schools – Tipton County Schools, Dyer County Schools, and Dyersburg County Schools (hereinafter, "Partners"). University and Partners may be referred to herein individually as a "Party" hereto and collectively as the "Parties" hereto.

RECITALS

WHEREAS, the Parties desire to enter into an agreement establishing the terms under which they will collaborate on the Rural Health Care Pathways Expansion grant (hereinafter, the "Project") as described with more particularity in Exhibit A, attached hereto and incorporated herein by reference;

WHEREAS, the purpose of this MOU is to clearly identify the roles and responsibilities of each Party as they relate to the Rural Health Care Pathway Expansion proposal to implement the physical therapy career pathway program in rural Tipton and Dyer counties. This MOU is intended to establish expectations between the University and Partners to provide secondary education students the opportunity to gain valuable career/clinical skills to address the labor shortage in the physical therapy sector in West Tennessee.

NOW, THEREFORE, in consideration of the foregoing premises, representations, mutual covenants and conditions and subject to the terms and conditions set forth below, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

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TERMS AND CONDITIONS

ARTICLE 1 – UNIVERSITY RESPONSIBILITIES

The University agrees to the following responsibilities:

- Serve as grant lead and fiscal agent.
- Manage grant administration, grant reporting, and facilitate communication between partners.
- Coordinate dual enrollment with identified secondary schools, Covington High School, Brighton High School, Munford High School, Dyer County High School, and Dyersburg City High School during and after the grant ends.
- Assist in the development of physical therapy career education to students enrolled in the physical therapy pathway at Tipton County, Dyer County, and Dyersburg City High Schools during and after the grant ends.
- Coordinate work-based learning opportunities (field trips, job shadowing, industry-driven project-based learning) for students with employers during and after the grant ends.
- Lead quarterly partnership meetings.

ARTICLE 2 – SECONDARY SCHOOLS RESPONSIBILITIES: COVINGTON HIGH SCHOOL, BRIGHTON HIGH SCHOOL, MUNFORD HIGH SCHOOL, DYER COUNTY HIGH SCHOOL AND DYERSBURG CITY HIGH SCHOOL

The Secondary Schools agree to the following responsibilities:

- Actively recruit students to enroll in physical therapy/health sciences career pathways that are applicable to each high school.
- Develop a physical therapy/health sciences career pathway with the assistance of designees from the University.
- Assist in the preparation for students to sit for and become certified as a Physical Therapist Aide through the American Medical Certification Association.
- Provide students with opportunities to participate in work-based learning activities.
- Manage dual enrollment with the University as applicable.
- Attend quarterly partnership meetings.
- Assist in the planning and implementation of work-based learning experiences with employers and the University while at the quarterly meetings.
- Ensure students participating in the program will follow the clinical affiliation agreements as established by the University and the Employer Partners.

ARTICLE 3 – EMPLOYER PARTNER RESPONSIBILITIES: LIFT THERAPY, INC., DYERSBURG HEALTH, AND STAR PHYSICAL THERAPY

The Employer Partner agrees to the following responsibilities:

- Provide physical therapy technician job opportunities to students enrolled in the physical therapy career pathways in the Secondary Schools listed in this agreement.
- Provide work-based learning opportunities for enrolled secondary students as needed, including student tours, mock or real interviews, job shadowing, project-based learning, and career fairs.
- Attend quarterly partnership meetings.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

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- Provide licensed clinicians to participate as a guest speaker in physical therapy career pathway instruction.

ARTICLE 4 – MUTUAL AGREEMENT

It is mutually understood and agreed by and between the Parties that:

- Modification of roles/responsibilities and the sustainability and scalability of the program are collectively decided by all Partners identified in this MOU.
- An employer partner may terminate its relationship with the program with a 30-day written notice to the lead agency or program director. Additional employer partners may be added through signature to this agreement.
- All partners commit to sustain the physical therapy career pathway with dual enrollment and work-based learning model in the proposal and partnership beyond the Rural Health Care Pathways Expansion grant.
- University may terminate this MOU at any time for convenience or in the event that funds are not appropriated for its continuation.
- Each Party shall be solely responsible for payment of its portion of all claims, liability, costs, expenses, demands, settlements, or judgments resulting from the negligence, actions or omissions of itself or those for whom it is legally responsible relating to or arising under this MOU.

ARTICLE 5 – EFFECTIVE DATE AND SIGNATURE

This MOU shall be effective upon the signature of the Partners authorized officials. This MOU shall run from the Effective Date through the 48-month duration of the grant period. This MOU shall be governed in accordance with the laws of the State of Tennessee without regard to its conflict of law principles.

This MOU may be executed in any number of counterparts, each of which together shall be deemed an original, but all of which together shall constitute one and the same instrument.

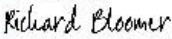

(SIGNATURE PAGE FOLLOWS)

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

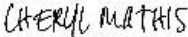
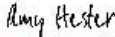
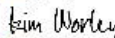
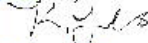
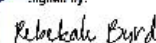
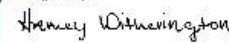
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IN WITNESS WHEREOF, each of the undersigned certifies that he/she is authorized to enter into this Agreement on behalf of the Party he/she represents and has caused this Agreement to be duly executed in its name and on its behalf.

THE UNIVERSITY OF MEMPHIS

DocuSigned by: 	1/30/2025
Richard Bloomer, Dean, College of Health Sciences, Univ of Memphis	Date
	01/29/2025
David J. Russomanno, Provost, VP for Academic Affairs, Univ of Memphis	Date


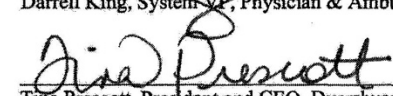
SECONDARY SCHOOLS

DocuSigned by: 	1/30/2025
Cheryl Mathis, Director of Schools, Dyer County Schools	Date
Signed by: 	1/30/2025
Amy Hester, CTE Director, Dyer County Schools	Date
Signed by: 	1/30/2025
Kim Worley, Superintendent, Dyersburg City Schools	Date
Signed by: 	1/29/2025
Kim Yeiter, CTE Director, Dyersburg City Schools	Date
Signed by: 	1/30/2025
Rebecca Byrd, Asst. Superintendent, Director of Instruction, Tipton County Schools	Date
Signed by: 	1/30/2025
Harvey Witherington, CTE Director, Tipton County Schools	Date

EMPLOYERS

Signed by: 	1/29/2025
Ross Maldonado, Partner, STAR Physical Therapy	Date

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

	1/29/2025
Darrell King, System VP, Physician & Ambulatory Svcs., Lift Therapy, Inc.	Date
	1/29/2025
Tina Prescott, President and CEO, Dyersburg Health	Date

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

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EXHIBIT A: PHYSICAL THERAPY CAREER PATHWAY

Overview

The physical therapy career pathway serves secondary students interested in pursuing a career in the physical therapy field. This program combines both clinical skills training using on-site instructors to provide individuals with the necessary training to pursue a career in physical therapy.

In addition, the coursework in the physical therapy career pathway program allows students to obtain the necessary knowledge and practical skills needed to sit for a Physical Therapy Aide certification.

Physical Therapy Career information

- Per the *U.S. Bureau of Labor*, employment of physical therapists is projected to grow 14 percent from 2023 to 2033, much faster than the average for all occupations.
- Employment widely available in various outpatient clinics, hospitals, nursing homes, and schools.
- College credit awarded for dual-enrollment courses and can be applied to 4-year undergraduate degree programs in the health science concentration of choice.
- Students enrolled in the physical therapy career pathway may be eligible to sit for the Physical Therapy Aide certification to begin working in the physical therapy field as a high school student.

Eligibility

- Admission requirements for the high school-based dual-enrollment program are as follows:
 - 19 composite score on the ACT
 - 18 English sub-score for students taking English Composition
 - 18 math sub-score for students taking college algebra; 15 math sub-score for students taking Probability/Stats
 - 100 admissions index score: 30 times the high school GPA (based on a 4.0 scale) plus the composite ACT score
 - Example: High School GPA of a 2.85 X 30 = 85.5 + 19 = 104.5

Curriculum and Schedule

The physical therapy career pathway may consist of the high school courses and activities listed below:

- Dual Enrollment Courses
 - BIOL 2010/2011 – Anatomy and Physiology I (with lab) – 4 credit hours
 - BIOL 2020/2021 – Anatomy and Physiology II (with lab) – 4 credit hours
- CTE Health Sciences Pathway
 - Health Sciences Course
 - Medical Therapeutic Course
 - Rehabilitation Careers Course
 - Clinical Internship Course

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

APPENDIX B. BUDGET

GRANT BUDGET				
Rural Health Care Pathways Expansion Grant				
The grant budget line-item amounts below shall be applicable only to expense incurred during the following				
Applicable Period:				
BEGIN: DATE		END: DATE		
POLICY 03 Object Line-item Reference	EXPENSE OBJECT LINE-ITEM CATEGORY ¹	GRANT CONTRACT	GRANTEE PARTICIPATION	TOTAL PROJECT
1. 2	Salaries, Benefits & Taxes	610,355.00	0.00	0.00
4, 15	Professional Fee, Grant & Award ²	0.00	0.00	0.00
5, 6, 7, 8, 9, 10	Supplies, Telephone, Postage & Shipping, Occupancy, Equipment Rental & Maintenance, Printing & Publications	214,162.00	0.00	0.00
11. 12	Travel, Conferences & Meetings	156,000.00	0.00	0.00
13	Interest ²	0.00	0.00	0.00
14	Insurance	0.00	0.00	0.00
16	Specific Assistance To Individuals	0.00	0.00	0.00
17	Depreciation ²	0.00	0.00	0.00
18	Other Non-Personnel ²	0.00	0.00	0.00
20	Capital Purchase ²	592,500.00	0.00	0.00
22	Indirect Cost	74,441.00	0.00	0.00
24	In-Kind Expense	0.00	0.00	0.00
25	GRAND TOTAL	1,647,458.00	0.00	0.00

¹ Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, *Uniform Reporting Requirements and Cost Allocation Plans for Subrecipients of Federal and State Grant Monies*, Appendix A. (posted on the Internet at: <https://www.tn.gov/finance/looking-for/policies.html>).

² Applicable detail follows this page if line-item is funded.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

GRANT BUDGET LINE-ITEM DETAIL

Line 1 Salaries and Wages

We are requesting the following amounts for key personnel with salary workload allocations dedicated to this project over the 48-month grant term with an estimated 3% cost of living increase, as per standard university guidelines: Project Director (20% effort) - \$140,650, Curriculum Co-director (15% effort) - \$75,625, Clinical Education Co-director (5% effort) - \$18,960, Dual Enrollment Director (5% effort) - \$18,960, Simulation Coordinator (5% effort) - \$16,159, Co-investigator (R. Bloomer) (2% effort) - \$25,493, Project Coordinator (25% effort) - \$53,864, and a total amount of \$136,000 for adjunct faculty to teach the dual enrollment coursework. The grand total for salaries and wages is \$485,712.

Line 2 Employee Benefits and Payroll Taxes

For the salary expenditures listed above, we are required to pay 7.65% FICA tax. Over the term of the grant, \$124,643 will be allocated employee fringe benefits and taxes.

Line 4 Professional Fees

N/A

Line 5 Supplies

We are requesting a total of \$20,000 student annual subscriptions to BodyViz anatomy visualization software, \$14,400 for the Learning Space simulation A/V software licensing, \$15,762 physical therapy pathway course supplies, \$144,000 for student stipends for the Certified Physical Therapist Aide exam fee and study guides to cover the 48-month grant period. Table 1 below shows a detailed list of the supply needs to meet grant activities. The total for supplies comes to \$194,162.

Line 6 Telephone

N/A

Line 7 Postage and Shipping

N/A

Line 10 Printing and Publications

This grant will provide funds for promotional items and printing for student program recruitment in the amount of \$5,000 per year for a total of \$20,000.

Line 11 Travel

Travel for work-based learning activities for each high school (5) has been allocated at \$500 for a total of 5 activities per semester including field trips (including to UML simulations labs), job shadowing, hands-on labs, and mock interviews for a total of \$50,000 over the term of the grant. \$1,500 will be allocated for domestic travel for the projector director and co-directors travel to work-based learning activities each year of the grant.

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Line 12 Conferences and Meetings

Professional conference fees include \$50,000 to send each CTE Director from each high school (5) to attend the annual National Consortium for Health Science Education conference (\$2,500) each year of the grant, \$30,000 to send the grant project director and 2 grant project co-directors who are licensed physical therapists to the annual American Physical Therapy Association conference (\$2,500 each) for each year of the grant, \$20,000 to send the project director and one other physical therapy faculty member to the annual Rural Health Association of Tennessee conference (\$2,500) each year of the grant. The total for all travel expenditures, including travel in Line 11 amounts to \$156,000 over the term of the grant.

Line 15 Grants and Awards

N/A

Line 18 Other Non-Personnel Expenses

N/A

Line 19 Capital Purchases

The bulk of the budget for this project will be invested in the capital equipment and space renovations required to teach the physical therapy career pathway curriculum, including the Physical Therapist Aide certification curriculum. Table 2 has been provided by the CTE directors at the secondary education partners, with the exception of the UML DPT program simulation equipment (Learning Space A/V equipment and software) that will be utilized to deliver case-based simulation learning experiences virtually or as a work-based learning experience. The total cost of the capital equipment is \$592,500.

Line 22 Indirect Costs

Eight percent of the total grant will be used as facilities and administrative costs to ensure the grant is managed properly and all grant commitments are achieved. This award has many facets, and the award will require a significant amount of work from multiple persons to complete all of the activities. The total cost of indirect costs is \$74,441.

Line 24 In-Kind

N/A

Line 25 Total Expenses

Total funding request: \$1,647,458

PHYSICAL THERAPY CAREER PATHWAY PROGRAM

Table 1. Physical Therapy Career Pathway Curriculum Supplies

Item(s)	Cost	Quantity	Total Cost
BodyViz – student annual subscription	\$50	400	\$20,000
Learning Space simulation A/V software annual licensing	\$3,600	4	\$14,400
Gait belts (x4) per school (5)	\$25	20	\$500
Basic wheelchair (x2) per school (5)	\$407.99	10	\$4,709.90
Bariatric wheelchair per school (5)	\$585.99	5	\$2929.95
Shoulder immobilizer (x2) per school (5)	\$21.99	10	\$219.90
First aid kit (x3) per school (5)	\$81.99	15	\$1229.85
Cotton stockinettes (x2) per school (5)	\$79.99	10	\$799.90
Pulse oximeter per school (5)	\$362.99	5	\$1814.95
PT advanced kit per school (5)	\$210.55	5	\$1052.75
Sphygmomanometer (x6) per school (5)	\$47.99	30	\$1439.70
Resistance bands per school (5)	\$9.35	5	\$46.75
Ankle weights per school (5)	\$29.99	5	\$149.95
Athletic tape per school (5)	\$56.78	5	\$283.90
Pre wrap tape per school (5)	\$26.99	5	\$134.95
Tens unit per school (5)	\$89.99	5	\$449.95
Certified PT Aide exam fees (20 students per school)	\$125	400	\$50,000
Cert. PT Aide exam study guides (20 students per school)	\$235	400	\$94,000
Totals			\$194,162

Table 2. Capital Purchases

Item(s)	Cost	Quantity	Total Cost
BodyViz Pro – teacher accounts	\$5,000	5	\$25,000
BodyViz 3D Anatomy Visualization Touch Table	\$40,000	5	\$200,000
BodyViz Training	\$6,250	2	\$12,500
Patient care simulation facility renovations for high schools (5 total)	\$50,000	5	\$250,000
UML DPT program simulation equipment	\$105,000	1	\$105,000
Totals			\$592,500