

UNLV

University of Nevada, Las Vegas

Office of the Senior Vice Provost for
Academic Affairs

Program Review Self-Study

Program(s) Under Review: Physical Therapy

Degree(s): Doctor of Physical Therapy (DPT)

Program Chair or Director: Merrill R. Landers

Dean: Ron Brown

Date of Report: 05/15/2023

GENERAL INSTRUCTIONS

- This is a formal document that will be read by Senior Vice Provost for Academic Affairs, the Nevada System of Higher Education (NSHE), and the Board of Regents, and will become a public document when submitted to NSHE. Please use professional language throughout the document.
- Writing style:
 - Write the self-study in third person (i.e., do not use “I, we or our”).
 - When referring to the program or faculty, use “the faculty” or “the program’s faculty”.
 - Use plain language when explaining parts of the program, i.e. don’t use discipline specific jargon or slang that will not be easy for others outside the program to understand.
 - Define abbreviations before using.
- Answer every question; do not refer to different sections as an answer. Information can be restated or summarized for subsequent sections.
- Please do not alter the format of this document.
- Ensure that the document has been edited (check for grammar, punctuation, notes to self, etc.) **prior to submission.**
- Send completed self-study electronically to: programreview@unlv.edu
- Questions can be addressed to the Academic Programs Analyst in the Office of the Senior Vice Provost for Academic Affairs or to programreview@unlv.edu

The Provost Office is committed to engaging programs in a clear and useful program review process. To facilitate continuous improvement, we welcome feedback from programs and departments, external or internal reviewers, and any other constituents of the process.

I. Program Description

a. College/Program

- College or School: School of Integrated Health Sciences
- Unit: Department of Physical Therapy (**UNLVPT**¹)
- Web address: <https://www.unlv.edu/degree/dpt>
- Program(s) being reviewed: Doctor of Physical Therapy (**DPT**²)
- Degrees and their abbreviations: Doctor of Physical Therapy

b. Primary Individual Completing This Worksheet

- Name: Merrill R. Landers
- Title: Chair and Professor
- Campus phone number: 702-895-1377
- Mail stop: 50329
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- Date of self-study: 01/12/2023

c. Other Faculty Involved in Writing This Report

- Names and e-mails:
 - Stacy Fernandes, AA IV, stacy.fernandes@unlv.edu

d. Catalog Description

- i. Insert the most recent [catalog description\(s\) of the programs\(s\)](#)

Doctor of Physical Therapy

This program is accredited by: CAPTE. More information can be found at:
<https://www.unlv.edu/provost/svpaa/accreditation>

Plan Description

The course of study at the University of Nevada, Las Vegas is an entry-level professional program designed to prepare students to enter the profession of physical therapy. A Doctor of Physical Therapy (DPT) Degree is awarded following the successful

¹ UNLVPT refers to the Department of Physical Therapy.

² DPT refers to the Doctoral of Physical Therapy program.

completion of the program that consists of intense academic and clinical work spread over six semesters and three summers. Students are prepared as generalists, but also have an opportunity to investigate specialized aspects of physical therapy through numerous clinical exposures. The program of study consists of 112 credits of graduate course work. These credits are divided among classroom, clinical, and research activities.

For more information about your program, including your graduate program handbook and learning outcomes, please visit the [Degree Directory](#).

Plan Admission Requirements

[Application deadlines](#)

Applications available on the [UNLV Graduate College website](#).

All domestic and international applicants must review and follow the Graduate College Admission and Registration Requirements.

Students enrolling in any class in the Department of Physical Therapy must be admitted (graduate standing only, no graduate provisional standing accepted) to the program in the Summer semester of each year. Since enrollment is limited in the Physical Therapy program, satisfactory completion of prerequisite courses does not assure an applicant of admission. No student may take any class as a "Non-Degree Seeking" student. Admissions criteria are reviewed by the faculty annually and are subject to change.

Prior to application to the program, the individual is advised to fully explore the nature of the profession of physical therapy. Students are expected to volunteer in or visit various physical therapy facilities in order to gain a broad view of the roles and responsibilities of a physical therapist. As part of the interview process, students will be assessed on their knowledge of the scope of the profession of physical therapy.

After applications are received, they are reviewed regarding the minimum requirements, i.e., baccalaureate degree, GPAs, etc. Only the leading candidates will be invited for interviews during the Spring semester, which are based on satisfactory completion of the admission requirements.

The following requirements are considered for admission into the Doctor of Physical Therapy program:

- Prior to entering the program, candidates must complete prerequisite courses and earn a baccalaureate degree from an accredited college or university. There is no preference given to any particular baccalaureate degree.

- A minimum overall undergraduate grade point average of 3.0 on a 4.0 scale with a minimum average of 3.0 on a 4.0 scale for prerequisite courses.
- A composite score of 300 or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE) is preferred. A score of 4 out of 6 is recommended on the Analytical Writing Section of the GRE.
- Students must apply to the DPT program via the new Physical Therapy Centralized Application Service (PTCAS). Only applications from PTCAS will be considered. Please use the URL www.ptcas.org to complete your application.

The following are required with your application to PTCAS:

1. Three letters of recommendation. Two of the letters need to be from a licensed physical therapist who can evaluate the applicant's potential as a student in the physical therapy program. The remaining letter can be from a former professor or employer.
2. An autobiographical statement of approximately 300 words describing the student's professional goals and reasons for seeking graduate education in physical therapy.
3. Knowledge of the field through actual work or volunteer experience (a minimum of 100 hours or more divided among hospital and outpatient facilities). Additional hours in diversified settings are strongly recommended.
4. KIRA Virtual Interview. The KIRA assessment is a one-way interview that is required and must be submitted along with your other PTCAS application materials by October 1st. The process will take 20-30 minutes to complete on your own time. You will be asked a question and given prep time and a set amount of time to respond. You'll be able to record your responses from the comfort of your home, and you can do so in your own time. You will need access to a desktop or laptop computer with a functioning camera, microphone, and internet connection to complete the interview. If you have any technical questions while completing the assessment, please email support@kiralent.com.
5. An interview will be required.

Information to be submitted to the Graduate College:

1. Complete and submit the Graduate College online application for admission, with appropriate fees.
2. Official transcripts from all previous college and professional schools.

The program is open to qualified applicants without regard to race, color, religion, sex, sexual orientation, age, national origin, marital status, or the presents of any physical, sensory, or mental disability.

Prerequisite Courses:

In addition to completing the requirements of a baccalaureate degree, applicants must have completed or be able to complete the necessary specific credits of prerequisite course work with a grade of at least a C prior to admission to the program. Grades below a C in prerequisite courses will not be accepted. No more than two prerequisite science courses should be in progress or incomplete and all prerequisite science courses must be completed by the end of the spring semester (quarter) prior to commencing the program. Those students in the process of fulfilling the requirements of a prerequisite course must realize that their acceptance into the program is contingent upon satisfactory completion of that course during the application process.

Courses taken on a pass-fail basis may not fulfill prerequisite requirements. Prerequisite course work must have been completed within 10 years from application cycle to fulfill requirements, which are as follows:

- One year of lecture-based biology courses
- One year of laboratory and lecture-based anatomy and physiology courses
- One year of laboratory and lecture-based inorganic chemistry
- One year of laboratory and lecture-based physics
- One year psychology (introduction to psychology and one semester of either child, adolescent, developmental or abnormal psychology)
- One semester statistics

Advisement:

All entering students will be assigned a specific faculty member for advisement.

Policies and Procedures:

Policies and procedures for didactic and clinical work regarding course grades, probation, separation, and reapplication are detailed in the Department of Physical Therapy Student Manual and Clinical Education Manual.

Objectives:

1. To prepare students to be the purveyors of physical therapy practice through clinical excellence, critical thinking, scientific inquiry, and social responsibility.
2. To prepare students to differentially diagnose enabling them to establish an appropriate plan of care and provide referral as necessary.
3. To prepare graduates who will be able to work autonomously in a wide variety of settings and roles as practitioners, clinical educators and researchers, supervisors, administrators and consultants.
4. To prepare students to adapt to changes in health care and society and be prepared to work in challenging environments with elderly, rural, and underserved populations.
5. To educate students in the design and implementation of culturally competent health care.

6. To develop scientific practitioners, who are able to demonstrate the ability to critically analyze literature, utilize evidence-based integrated treatment approaches, and value clinical based research.
7. To prepare graduates to educate and encourage patients to achieve functional independence so they may have an improved quality of life and become more productive members of society.
8. To prepare graduates who will be able to organize and promote health awareness, wellness, and prevention education, and reintegrate populations with special needs into the community throughout-reach programs.
9. To prepare graduates to assume a leadership role in addressing critical issues that affect clinical practice, education, research, and public policy.
10. To prepare graduates to be committed to a lifetime of self-directed learning, professional development, integrity, community involvement, and to exemplify professional and personal ethics and values.
11. To prepare graduates to demonstrate understanding of medico-legal issues in physical therapy practice through active involvement in professional organization.
12. To educate students on the benefits of working interdependently with other health care professionals using a team approach to patient care.

Students are accepted into a degree program as described in the Graduate Catalog. The faculty and corresponding sub-disciplines and sub-plans within the described programs are subject to change at any time.

Plan Requirements

Total Credits Required: 112

Course Requirements

SUMMER SEMESTER 1ST YEAR COURSES - CREDITS: 8

- DPT 726 - Professional Development I
- DPT 727 - Evidence-Based Practice in Physical Therapy
- DPT 744 - Gross Anatomy I
- DPT 744L - Gross Human Anatomy Lab I
- DPT 745 - Gross Anatomy II
- DPT 745L - Gross Human Anatomy Lab II

FALL SEMESTER 1ST YEAR COURSES - CREDITS: 20

- DPT 730 - Foundations of Observation and Assessment
- DPT 730L - Foundations of Observation and Assessment Lab
- DPT 741 - Musculoskeletal I - Orthopedic Principles
- DPT 742 - Clinical and Pathological Physiology
- DPT 746 - Neuroanatomy

- DPT 746L - Neuroanatomy Lab
- DPT 774 - Prof Dev II: Psychosocial Aspects of Physical Therapy
- DPT 790 - Clinical Research in Physical Therapy

SPRING SEMESTER 1ST YEAR COURSES - CREDITS: 17

- DPT 732 - Therapeutic Exercise
- DPT 732L - Therapeutic Exercise Lab
- DPT 735L - Functional Training Lab
- DPT 749 - Applied Exercise Physiology
- DPT 749L - Applied Exercise Physiology Lab
- DPT 754 - Musculoskeletal II – Assessment of the Spine and Extremities
- DPT 754L - Musculoskeletal II – Assessment of the Spine and Extremities Lab
- DPT 756 - Neurophysiology

SUMMER SEMESTER 2ND YEAR COURSES - CREDITS: 9

- DPT 740 - Movement Science
- DPT 748 - Pharmacology
- DPT 752 - Modalities
- DPT 752L - Modalities Lab
- DPT 761 - Supervised Clinical Education I

FALL SEMESTER 2ND YEAR COURSES - CREDITS: 17

- DPT 720 - Professional Development III
- DPT 757 - Wound Care
- DPT 785 - Musculoskeletal III – Rehabilitation of the Spine and Extremities
- DPT 785L - Musculoskeletal III – Rehabilitation of the Spine and Extremities Lab
- DPT 786 - Neurological Rehabilitation
- DPT 786L - Neurologic Rehabilitation Lab
- DPT 791 - Applied Research Statistics

SPRING SEMESTER 2ND YEAR COURSES - CREDITS: 15

- DPT 750 - Prosthetics and Orthotics
- DPT 750L - Prosthetics and Orthotics Lab
- DPT 758 - Diagnostic Testing and Imaging
- DPT 759 - Pediatric Rehabilitation
- DPT 759L - Pediatric Rehabilitation Laboratory Experience
- DPT 770 - Acute Care & Cardiopulmonary Rehabilitation
- DPT 770L - Acute Care and Cardiopulmonary Rehabilitation Lab
- DPT 780 - Balance and Vestibular Rehabilitation

SUMMER SEMESTER 3RD YEAR COURSES - CREDITS: 8

- DPT 762 - Supervised Clinical Education II
- DPT 772 - Physical Therapy Administration
- DPT 789 - Musculoskeletal IV

FALL SEMESTER 3RD YEAR COURSES - CREDITS: 9

- DPT 763 - Supervised Clinical Education III
- DPT 764 - Supervised Clinical Education IV

SPRING SEMESTER 3RD YEAR COURSES - CREDITS: 9

- DPT 798 - Directed Research (3 credits) *Course Fee
- DPT 765 - Supervised Clinical Education V

Degree Requirements

Satisfactory completion of the 112 credits of the Physical Therapy program including the required period of clinical education with a grade point average of 3.00 or higher on a scale of 4.00.

Maintain a cumulative grade point average of 3.00 or above each semester enrolled.

Receive a grade of B- or above in all required physical therapy courses. Students who do not maintain a 3.00 average or who receive any grade less than a B- in any course at the end of the semester will be notified in writing and placed on probation at that time. A second grade of C+ or lower received in any course in the ensuing semester or failure to restore the cumulative average to 3.00 or above during the ensuing semester will bring about separation from the program. The student's status in the program will be determined the Chair/Director on the recommendation of the Academic Review Committee (ARC) regarding the student's separation or action plan for remediation.

The student will not progress in the program if any of the following occur:

- An earned F in any didactic course. This results in immediate separation without the option for reapplication.
- Failure of a third attempt of any clinical competency check-off with the exception of the final practical exam.
- A failure of a final practical exam (different than the competency check-off).
- A grade of C+ or below in more than one course in any semester.
- Inability to rectify probationary status within the time frame allotted by the ARC.
- A student on probation whose actions warrant probation in another category (academic, professional behavior, clinical) may also be separated.

A student may register for a Supervised Clinical Education course only two times if the option to reapply is approved by the ARC and a recommendation is made to the

department chair/director. This option is only available to students who have failed a clinical rotation and have been separated from the program. This option is not available to students failing didactic course work. A student who is registered for the same course twice and has withdrawn or received a Fail is ineligible for readmission unless otherwise approved by the ARC, Department Chair, and Graduate Dean.

The students must follow the proposed curriculum in the specified time frames unless otherwise approved by the ARC, Department Chair, and Graduate Dean.

Credit by Challenge Examination: Graduate courses in the Department of Physical Therapy may not be challenged for credit.

The program must be completed within six years from the date of matriculation. The chair/director will evaluate potential exceptions.

In addition to the course requirements, the student must satisfactorily prepare a written document and oral presentation of a final research project, professional paper, or case report. The presentation will satisfy the requirements for a final capstone experience and will be open to the public.

Students must be in good standing with the Department of Physical Therapy and cannot be on a probation status at the time of graduation. Policies related to student probation, separation, and academic progress as stated in the current physical Therapy Student Manual are in compliance with the Graduate College.

Plan Graduation Requirements

The student must submit and successfully present their final research project, professional paper, or case report by the posted deadline. The presentation must be advertised and is open to the public.

The student must electronically submit a pdf copy of their approved, properly formatted thesis, doctoral project, or dissertation to the Graduate College for format check. Once approved, the student will submit the approved electronic version to ProQuest by the posted deadline. [Deadlines can be found here.](#)

Students may apply for graduation up to two semesters prior to completing their degree requirements. All required forms must be submitted to the graduate college via the [Grad Rebel Gateway](#).

- ii. Is the description for the program(s) correct? If not, what needs to be changed? Have changes been initiated in Curriculog?
 - o It is correct and there is no need for an update.

e. Relationship to Other Programs

- i. What relationship does this program have to other programs, e.g. articulation, transfers, collaborations, partnerships, in the NSHE system?
All undergraduate programs have transfer agreements.
 - o There are no formal relationships, agreements, or collaborations with any other entities in the NSHE system except that we are part of the Division of Health Sciences that includes the School of Medicine, School of Dental Medicine, School of Nursing, School of Public Health, and the School of Integrated Health Sciences (SIHS) that includes four Departments (Health Physics and Diagnostic Sciences, Kinesiology and Nutritional Sciences, Brain Health, and Physical Therapy. In addition, the SIHS also includes the following programs within those departments: Athletic Training, Dietetics, Occupational Therapy, Radiography, Health Physics, and Medical Physics. There are no other physical therapy programs in the state system; however, there are DPT programs at Touro University in Henderson, Nevada, and Hawaii Pacific University is opening a hybrid program in Las Vegas in 2023.
- ii. What relationship does this program have to other programs at UNLV, e.g. collaborations, partnerships, affiliated faculty, general education requirements?
 - o There are no formal relationships, agreements, or collaborations with any other entities at UNLV. While there are no formal collaborations, the program is well-positioned within a growing Division of Health Sciences with diverse health professions and many opportunities for collaborations. We have had research collaborations with most of the other entities. In addition, we have yearly interprofessional educational workshops with other health professions. UNLVPT faculty are able to participate at part of UNLV Health, which is the business end of the Academic Medical Center. In the future, when UNLVPT opens a faculty clinic, we would fall under the UNLV Health umbrella for billing and other business-related services.

II. Mission Alignment, Excellence, and Productivity

- i. What is the program's mission statement?
 - **Mission:** To enhance human health and quality of life through education, scholarly activity, and community service.
 - **Vision:** To be recognized nationally among the top tier of physical therapy programs for impactful research, educational excellence, and service that promote the improvement of health of individuals, populations, and society.

- **Core Values:**
 - Learner-centered education with faculty accessibility
 - Professionalism (accountability, altruism, collaboration, compassion and caring, excellence, integrity, duty, social responsibility)
 - Respect for the dignity and diversity of all individuals
 - Research engagement and dissemination that advances the practice of physical therapy and rehabilitation science
 - The Quadruple Aim
 - Competent and compassionate adaptive practitioners who are prepared to engage in critical thinking, life-long learning, evidence-based practice, and to provide interprofessional care
 - Professional practice and community service to Nevada and its rural and underserved areas.
 - The program has also developed a new research mission, vision, and core values for the program that serve as a framework for the department's research enterprise. This is not shared in this document but is available upon request.
- ii. Briefly describe how this program is aligned to and supports achievement of the university's [Mission](#) and [Top Tier 2.0 Strategic Plan](#).
1. The program's Mission, Vision, and Core Values were specifically designed to be aligned with the UNLV Mission and Top Tier 2.0 Strategic Plan. The program's Mission and Vision detail the importance of education (**student achievement**), scholarly activity (**research, scholarship, and creative activity**), and community service (**community partnerships**) with the ultimate goal of improving the health of individuals, populations, and society (**UNLV Health, Social Justice, Equity, and Inclusion**). In addition, the Core Values also align with UNLV's Mission and Top Tier 2.0 Strategic Plan (program core value listed with Top Tier 2.0 aim in parentheses):
 1. Learner-centered education with faculty accessibility (**Student Achievement**);
 2. Professionalism (accountability, altruism, collaboration, compassion and caring, excellence, integrity, duty, social responsibility) (**Social Justice, Equity, and Inclusion**);
 3. Respect for the dignity and diversity of all individuals (Social Justice, Equity and Inclusion); Research engagement and dissemination that advances the practice of physical therapy and rehabilitation science (**Research, Scholarship, and Creative Activity**);

4. The Quadruple Aim (**Research Scholarship, and Creative Activity; UNLV Health; Social Justice, Equity, and Inclusion**);
 5. Competent and compassionate adaptive practitioners who are prepared to engage in critical thinking, life-long learning, evidence-based practice, and to provide interprofessional care (**UNLV Health**); and
 6. Professional practice and community service to Nevada and its rural and underserved areas (**UNLV Health; Socio-Economic Development, Community Partnerships; Social Justice, Equity, and Inclusion**).
- iii. Provide at least three examples of the integration of teaching, research and service at the program level (e.g. faculty mentoring which lead to student presentations at conferences, service learning classes, community service activities involving students, or other noteworthy student activities and achievements).
1. Every student in the DPT program is required to complete a capstone project in collaboration with program faculty. The projects build on the student/mentor relationship, and the topics are flexible allowing each student to conduct a research or service-learning project that is aligned with their interests. The capstone project topics are evenly distributed between research projects and service learning projects. Historically, a majority of the projects, 65%, are presented in national or international forums, and approximately 45% are eventually published through the peer review process. Please see Appendix A for a table with all of the capstone projects since 2010 and how they were disseminated.
 2. All of our capstone projects are framed in such a way as to give back to the communities that we serve. Each of the different types of capstone projects serve a different community. For example, consider the two main types of capstone projects:
 - **Research capstone.** These are traditional group research projects under a faculty members mentorship and within the scope of interest and expertise of the faculty member. We frame these projects as a supervised and experiential teaching/mentoring way to build reasoning skills; however, importantly, these research projects benefit the health of individuals and society by disseminating the findings to the biggest and most impactful audience possible. There is value in thinking about the research capstones as “serving our community” because it focuses our efforts on impactful research. In addition, students learn that the findings of these research studies don’t just help people of Nevada but cross national and international boundaries and eventually become

available to healthcare practitioners, educators, and researchers in under-resourced countries. By framing the research capstones as service, it helps build a sense of salience for the mentor and students.

- **Service-learning capstone.** The main point of a service-learning project is that it gives the students a mentored, experiential learning experience that serves an important community need. First, the students and faculty determine a community need and then design a program to address that need. The program has learning objectives and outcomes and has the same emphasis on reasoning that the research capstones do. Some examples of service-learning projects are the following: Spanish language back pain schools at Volunteers in Medicine, screening older adults for fall risk through Nevada Goes Falls Free Coalition, Anatomy Academy for students and underserved and rural elementary schools (goal of drawing interest in the health professions), and physical therapy services for the School of Fine Arts (targeting dancers and musicians).

3. Another example of the integration of teaching, research, and service are our clinical education experiences. While a focus of these clinical education experiences is clearly on student learning, it is still fundamentally about providing an excellent provision of care for patients. Thus, this provides a service to the community. DPT program students are expected to integrate evidence-based care with practical real-world experiences under the mentorship of clinical educators. UNLVPT also feels that it is important to give back and, as such, each student is required to do one clinical experience in an underserved or rural affiliation. This is another way that UNLV has integrated research, teaching, and service in the curriculum.

- iv. List and briefly describe five highlights or areas of excellence of the program.

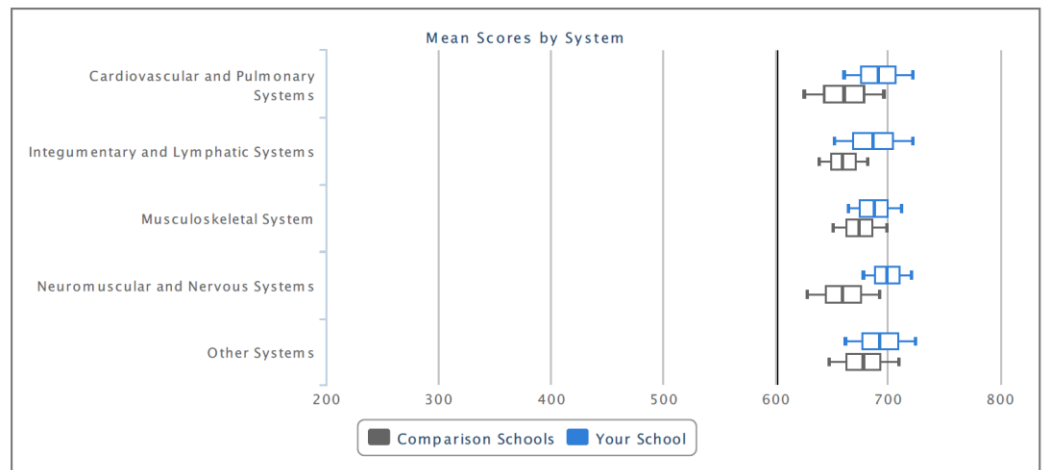
1. **National rankings**

UNLV DPT is currently ranked #57 out of 237 programs (2020 ranking; 4-year cycle) of the US News and World Report (USNWR). This puts the program in the highest quartile of all programs in the country. UNLV DPT is also the highest rated graduate professional program at UNLV relative to the number of programs in that field (https://en.wikipedia.org/wiki/University_of_Nevada,_Las_Vegas). That is, we are in the upper quartile (Q1) of physical therapy programs in the U.S. whereas other programs at UNLV might have a higher ranking but because there are fewer programs, they are in a lower quartile (Q2). Importantly, this USNWR ranking has been steadily improving with UNLV DPT at #79 in 2016, and #121 in 2012.

Another national ranking organization, NuHealth Solutions (<https://www.physicaltherapyschoolratings.com>) ranked UNLV's DPT program #5 out of 259 programs (2022 ranking). Unlike the USNWR, which only considers reputation, the NuHealth Solutions ranking incorporates a more comprehensive set of metrics, such as program cost, faculty-to-student ratio, board exam pass rate, graduation rate, and curriculum-related factors. Collectively, these rankings and the consistent improvement in program ranking demonstrates that this program is emerging as one of the top DPT programs in the country.

2. **National Board Exam Performance (NPTE).** The program has a 100% pass rate for the NPTE for every student who has graduated from the program. This is an incredible accomplishment that few other programs in the country have achieved. The first time pass rate is 95.1% which is also higher than the national average (91%). The students not only pass at a very high rate but also score higher than the national average across all content areas of the exam. When the UNLV DPT program benchmarked the NPTE scores to physical therapy programs in the western United States that are currently ranked higher by the US News and World Report (i.e., #4 University of Southern California, #13 University of Colorado, #13 University of Utah, #13 University of Kansas, #25 University of California, San Francisco, #25 University of Washington), the UNLV DPT students outperformed the benchmarked students across all content domains (see Figure 1 below).

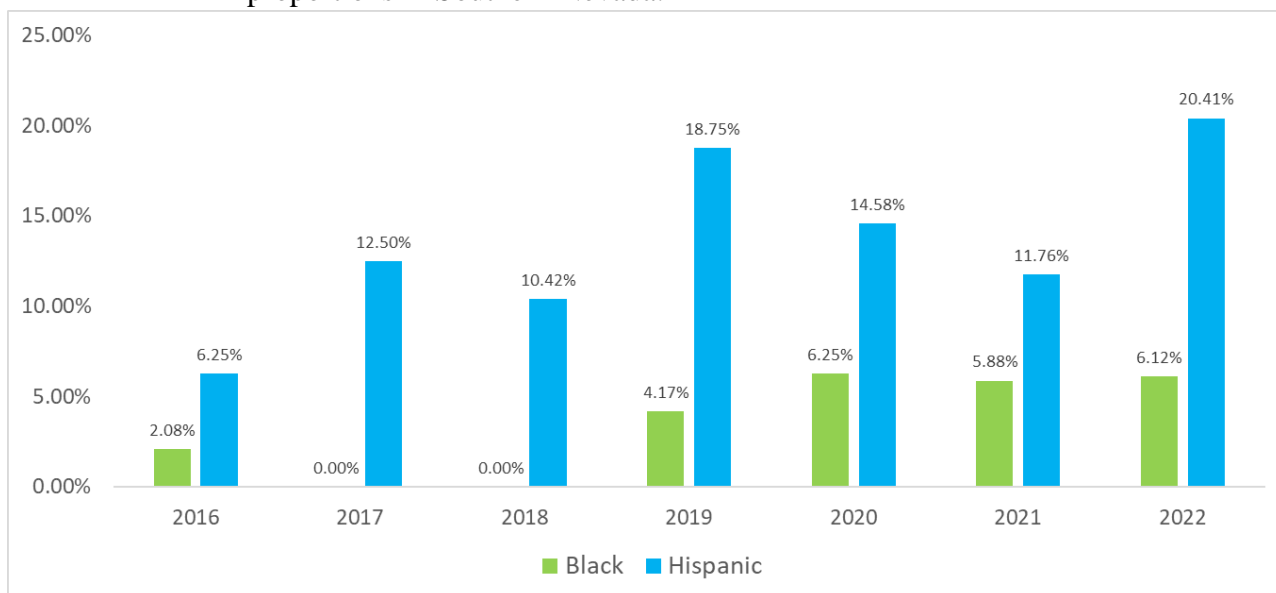
Figure 1. UNLV student NPTE scores (blue) compared to student NPTE scores from the aforementioned higher ranked benchmarked programs in the western US. Please note that a 600 score is a passing score.



3. **Faculty teaching.** Of the 13 UNLV DPT faculty, almost 50% (n=6) have won the School of Integrated Health Sciences Teacher of the

Year Award within the last 10 years. On course evaluations, a majority of the faculty in the program have teaching scores well above the School mean.

4. **Student Diversity.** Approximately 5 years ago, UNLV DPT implemented a new holistic admissions process to improve the diversity of program students as there was significant underrepresentation from two populations, Hispanic students and Black students. This updated, holistic admissions process produced significant improvements in the proportion of diverse students in the program with 61% of current students identifying as Hispanic, Black, Asian, and/or Hawaiian/Pacific Islander. Despite this improvement, Hispanic and Black students are still underrepresented considering proportions in Southern Nevada.



The program continues to evaluate admission and recruitment processes to eliminate barriers and improve access. The program has implemented faculty development in the ‘inclusive excellence’ domain to better help students from underrepresented populations. Specifically, faculty have been asked to engage in learning opportunities in the inclusive excellence domain and then to report these in their annual evaluations. We have also read published papers as a faculty and discussed these at faculty meetings. The emphasis on inclusive excellence continues beyond the recruitment process with the program supporting organized gatherings and activities for students to support a sense of belonging and inclusion (e.g., program has helped facilitate the development of a DEI Club, Las Vegas Chapter of the National Association of Black Physical Therapists (student led), Spanish Language Club, and supported 3 APTA Centennial Scholars

with projects all within the DEI realm). These efforts are designed to support students by creating environments of support and community.

5. **Graduation and employment rate.** A survey of program graduates reveals that, 100% of UNLV DPT alumni found employment in the physical therapy field within one year of graduation. Additionally, 94.6% of all students who started the program graduated. The graduation rate is a testament to dedicated and proactive student support systems that are designed to identify and remediate students who are struggling with program content. For instance, the Academic Review Committee works collaboratively with students to recognize problems that are affecting their performance, and it provides them with ideas and support to help them address these issues.
- v. Provide an indication of faculty productivity appropriate for your unit (lists of publications and other creative activities, grant proposals submitted and funded, installations designed, etc.) organized by category.
 - Over the last 4 years, 13 UNLV DPT faculty (7 tenured or tenure track) were a productive group combining to produce an average of 36.75 peer-reviewed publications per year (2022=46, 2021=31, 2020=38, 2019=32). More than 70% of these publications were accepted to top tier journals (Quartiles 1 or 2 of the Web of Science Journal Citation Reports Impact Factor ratings in specific journal categories).
 - Of the 7 tenured or tenure track faculty, 5 currently have a federal grant (e.g., National Institute of Health, Agency for Healthcare Research and Quality, Department of Defense) to conduct their research, including one R00 and one K01 award from the NIH for a total of \$1,136,565.0 in the last two years (\$695,000 from federal grants). This high proportion of faculty with current federal grants is good. Additionally, there are currently several other grant proposals under review from faculty that look promising.
 - Individually, UNLV DPT faculty have been very productive in the research realm producing a quality and quantity of research that is consistent with Top Tier expectations. The table below for data about rank, publication totals, H-index values, and i10 index values for faculty who are tenured or tenure track (arranged by years of seniority at UNLV starting at the top). FIR faculty were not included as they do not have NSHE research expectations.

Name	Rank	Publications	H-Index ³	i10-Index ⁴
Merrill Landers	Professor	76	27	49
Daniel Young	Associate Professor	54	14	20
Szu-Ping Lee	Associate Professor	38	16	20
Kai-Yu Ho	Associate Professor	32	11	12
Jing Nong Liang	Associate Professor	22	8	6
Thessa Hilgenkamp	Assistant Professor	83	31	55
Jenny Kent	Assistant Professor	19	10	10

- vi. Provide an indication of student productivity appropriate for your unit (lists of publications and other creative activities, grant proposals submitted and funded, installations designed, etc.) organized by category.
- Please see the table detailed in Appendix A. This table lists all of the student capstone projects and their outcomes (e.g., publication/s, presentation/s). As you can see from Appendix A, there is a high proportion of capstone projects (65%+) that are presented nationally or internationally. In addition, almost 50% of the capstone projects (45%) that are published in peer review journals. In the past, both of these percentages were higher; however, since we began allowing service-learning projects, the proportion of presentations and publications has gone down a bit.

III. External Demand for the Program

- i. Who are the main (local and regional) stakeholders of your educational programs? In other words, which employers and entities benefit from these programs, by hiring the graduates or admitting them to graduate and/or professional programs?
- In history of the DPT program, 100% of students graduating from UNLV DPT have found employment in physical therapy within a year of graduation. Approximately 50% remain in the state. Of those that stay in Nevada, approximately 25% find employment in the Reno area, and the remaining 75% stay in Southern Nevada. Of the 50% that seek employment outside the state, half go to California with the rest being equally proportioned among states in the west (i.e., Utah, Arizona, Washington, Colorado, Idaho). A few students move to states outside of the intermountain west.
 - Graduates from UNLV are employed by the following entities:
 - Acute Care Hospitals (e.g., HCA, Valley Health, Veteran's Affairs, Dignity Health)

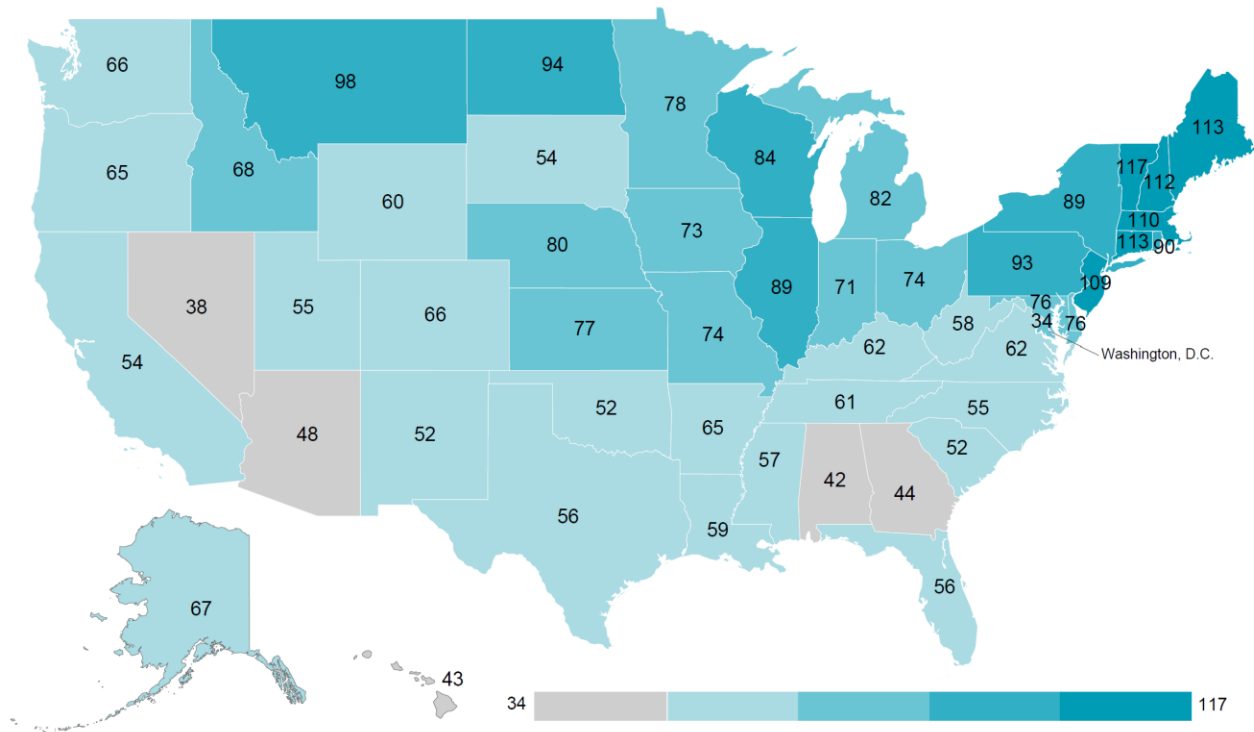
³ The h-index is the number of publication with a citation number greater than or equal to h. A h-index of 27 means that the author has 27 publications with at least 27 citations.

⁴ The i10-index is the number of publications with at least 10 citations.

- Rehabilitation Hospitals (e.g., Encompass Health Rehabilitation Hospital, PAM Health Rehabilitation Hospital, Dignity Health Rehabilitation Hospital, Valley Health)
- Long-term care (e.g. Advanced Healthcare, Kindred, Life Care Centers)
- Outpatient physical therapy clinics (e.g., Cleveland Clinic Lou Ruvo Center for Brain Health, Dignity Health, Fyzical, Optimal Physical Therapy, Synergy Physical Therapy)
- Clark County School District
- Home Health Agencies

- ii. Describe the needs of these stakeholders for graduates of this program.
 - There remains strong interest in UNLV DPT graduates and Nevada has the lowest rate of PTs per 100,000 (see image below from the American Physical Therapy Association - APTA Physical Therapy Workforce Analysis: A report from the American Physical Therapy Association. Alexandria, Virginia. 2020.).

Number of Licensed Physical Therapists per 100,000 People by State



- Currently, there are only two DPT programs in Nevada (UNLV and Touro). Between the two programs, approximately 85-95 new DPTs graduate per year. Based on current trends, this number of graduates has created a healthy environment for job prospects for graduates but we are not likely in surplus territory like many areas of the country currently are; however, Hawaii Pacific University, is opening a new

hybrid DPT program in Las Vegas that aims to matriculate and graduate 100 DPT students per year. If this program meets their target, it may create a surplus of physical therapists in the region, and this surplus might reduce demand for graduates and result in declining program enrollment. Already, a surplus is being observed in other areas of the country, and there has been a steady drop in applicants nationwide in each of the last 5 years. Despite these emerging challenges, this program is in a good position because it is the most affordable program in Nevada, has a good reputation, and excellent outcomes.

- iii. What are the anticipated placement needs for program graduates over the next 3-5 years? Please cite your sources (e.g. Occupational Outlook Handbook, Nevada Workforce Research Data System, etc.).
- Merrill Landers, the Chair of the program, recently published Point of View Paper in Physical Therapy Journal on this issue.
 - Deusinger SS, Landers MR. Storm clouds on the horizon: the three perils of unconstrained academic growth in physical therapist education. PTJ: Physical Therapy & Rehabilitation Journal. 2022;102:1-6. DOI: 10.1093/ptj/pzac046
 - Here is an excerpt from this publication on what is happening on a national scale:
 - *“Even though the need for PTs is projected by the Bureau of Labor Statistics (BLS) to increase 21% over the next several years, the supply has been outpacing the projected growth every year since 2017. The Health Resources & Services Administration also reports that in 2022, the supply of PTs (267,870) will exceed the demand by 5,470 (262,400). Data from the American Physical Therapy Association (APTA) also projects a surplus of around 5,000 PTs in 2022 that increases to 25,000 by 2031. Regardless of methodological concerns, taken together, these two workforce estimates suggest a growing supply and demand imbalance that will likely worsen with the continued proliferation of new and expansion programs. Moreover, the lack of substantial change in our practice models and our reimbursement for care may potentiate this imbalance. New program growth has accelerated since 2013 with 45 newly accredited programs and 70 additional programs in either the candidacy stage (19) or other stages of development (51). Importantly, the APTA workforce projections drew data from the Commission on Accreditation of Physical Therapy Education (CAPTE), which only included accredited and candidacy programs and did not include the 51 additional programs in pre-accreditation stages*

of development, most of which can be expected to achieve accreditation. Thus, the APTA workforce projections undercount the number of PT graduates expected per year by an estimated 2346 graduates when taking into account the 51 developing programs and average typical class size of 46 students per cohort. Even with a 3.7% attrition rate incorporated into the APTA's workforce projections, available data demonstrate growth outpacing demand... A peak number of applicants and applications to DPT programs occurred in 2016, with a slow decline occurring each year since that time. The most recent data from PTCAS shows a 6.7% decline in completed applications during the period 2019-2020. Although environmental conditions (e.g., the pandemic) could be responsible for any decline, it is important to recognize that, of 13 health care professions (i.e., allopathic medicine, communication disorders, dentistry, occupational therapy, optometry, osteopathic medicine, pharmacy, physical therapy, physician assistant, podiatry, psychology, public health, veterinary medicine), physical therapy had the third largest decrease in applicants in 2019-2020 and the second largest decline in applications over the last 4 years. Perhaps more importantly, a deepening trend of decreasing enrollment is beginning in DPT programs, with 92 programs of 275 (33.5%) reporting the inability to matriculate a full cohort in 2021 (2015 = 35, 2016 = 50, 2017 = 48, 2018 = 53, 2019 = 64, 2020 = 71). An increasing number of programs and enrollment positions across programs, paired with a flat or decreasing number of applicants does not bode well for the collective health of our DPT programs."

- While that excerpt does not paint a positive nationwide picture for PT and educational DPT programs in the coming years, Nevada is still in a relatively good position due to the low number of PTs per 100,000. Unfortunately, the balance of production versus need may be upset by the emergence of the Hawaii Pacific University program, which is starting with an incoming cohort of 100 students. Nearby western states are also wading into this area with 13 new programs in the following western states:
 - 1 new program in Honolulu, Hawaii (Hawaii Pacific University);
 - 2 new programs in Utah (University of Utah in St. George and a new hybrid program);

- 1 new program in Colorado (Colorado Mesa), 4 new programs in Arizona (Creighton, University of Arizona, Tufts – Phoenix, Northern Arizona University’s new hybrid program);
- 4 new programs in Washington (Tufts – Seattle, Pacific Northwest University, Whitworth, Northwest University);
- 4 new programs in Oregon (Oregon Health Sciences, Oregon Institute of Technology, Oregon State Cascades, Western University of Health Sciences); and,
- 1 new program in California (Southern California University of Health Sciences).

As most of these programs are only beginning to enroll students, the flooding of the market in the Southwest may not be fully realized for another 2-3 years once those DPT students start to graduate. It is anticipated that a serious strain in the market will occur in about 5-7 years. The good news is that the UNLV DPT program will continue to be one of the best values in the region on account of the relatively low tuition and the excellent outcomes. For example, UNLV DPT tuition and fees are less than any program in the state of California even when you account for paying out-of-state fees at UNLV. There are only a few programs in the intermountain and Pacific west that are less expensive. It is anticipated that the more expensive private schools, especially those with a low or poorly developed reputation, will experience a disproportionate amount of the declining applicant numbers.

- iv. What changes to the program, if any, will the anticipated placement needs for the program graduates require?
 - There are no anticipated changes, but UNLV DPT will continue to incentivize rural and underserved clinical opportunities through scholarships for students as there is a big need for PTs in those settings.
- v. Describe the placements of recent graduates.
 - 100% of UNLV DPT graduates found employment as physical therapists within one year of graduation. These data are provided from an annual alumni survey.
- vi. If the program does not have placement information on graduates, what is the plan to gather that information?
 - The UNLV DPT program requires all graduating DPT students to complete a survey each year at graduation (100% return rate) and another survey one year after graduation (28% return rate) (see Appendix C).

- vii. As required by NSHE, discuss how the program assesses whether the graduates are meeting employers' needs.
- Employers of recently hired UNLVPT graduates are surveyed each year. For the most recent survey, the results from the employer survey indicate that the alumni were:
 - Able to commit to and demonstrate the professional behaviors as outlined by the APTA
 - Prepared to engage in the ethical practice of physical therapy reflecting the core values as outlined by the APTA;
 - Able to provide care to rural and underserved populations
 - For specific details from the employer survey, please see Appendix C.

IV. Program Resources

a. Faculty Time and GA Resources

Please fill in the table below in order to answer the questions below.

Staff Type		Fall 2019	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022
Tenured & Tenure-Track Faculty	Total Number:	6	6	6	6	7	7
	Percent of Courses Taught:	6.45%	11.54%	5.71%	14.47%	11.54%	18.75%
	Student Credit Hours Taught:	6.00	11.00	6.00	11.00	9.00	13.00
Faculty in Residence (FIRs), Lecturers, & Visiting Faculty	Total Number:	6	6	6	6	6	6
	Percent of Courses Taught:	69.36%	65.38%	71.43%	56.58%	75.00%	64.06%
	Student Credit Hours Taught:	43.00	47.00	58.00	49.00	50.00	46.00
Part-time Instructors (PTI)	Total Number:	3	5	3	7	4	4
	Percent of Courses Taught:	24.19%	23.08%	22.86%	28.95%	13.46%	17.19%
	Student Credit Hours Taught:	10.00	10.00	8.00	16.00	5.00	8.00

State-supported Graduate Assistants (GAs) Provided by the Graduate College	Total Number:	4	4	0	0	0	0
	Percent of Courses Taught:	0	0	0	0	0	0
	Student Credit Hours Taught:	0	0	0	0	0	0

b. Budget

i. Fill in the three tables below and use this information to answer the questions below.

Revenues	Fiscal Year (FY) 18-19	FY 19-20	FY 20-21	FY 21-22
State Operating Account	\$1,013,222.00	\$1,130,130.00	\$980,462.00	\$992,447.00
Student Special Fees	\$121,392.00	\$97,439.00	\$141,845.00	\$188,545.00
Student Differential Fees	\$1,335,065.00	\$1,524,031.00	\$1,504,048.00	\$1,417,521.00
Summer Fees	\$59,891.25	\$68,275.87	\$66,559.02	\$85,292.47
IDCR	\$748.40	\$2,019.19	\$3,856.14	\$3,659.08
Other (GPSA/UFTC)	\$1,250.00	\$0	\$0	\$2,800.00
Total Revenue	\$2,531,568.65	\$2,821,895.06	\$2,696,770.16	\$2,690,264.55

Expenses	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Salaries (faculty, staff, GAs, work-study student, etc.)	\$1,064,540.96 (with added Fringe Benefits) \$1,327,873.89	\$1,264,070.96 (with added Fringe Benefits) \$1,624,510.54	\$1,342,369.16 (with added Fringe Benefits) \$1,737,982.35	\$1,093,221.26 (with added Fringe Benefits) \$1,409,940.72
Operating Expenses (operational and instructional supplies, equipment maintenance, software licensing, online electronic subscriptions, etc.)	\$124,319.37	\$137,779.76	\$169,057.12	\$202,686.10
Student Activities (recruitment, career services, SORGs, student travel, etc.)	\$53,322.38	\$67,593.58	\$36,254.33	\$64,361.13

Research (Start-Ups, publication fees, abstract submissions)	\$20,071.90	\$101,552.92	\$28,699.92	\$27,249.13
Travel & Professional Development (registrations, membership/license fees, etc)	\$38,736.70	\$47,470.81	\$12,711.02	\$47,682.26
Clinical Education (Travel & Clin Ed associated expenses)	\$15,950.91	\$12,880.79	\$11,829.36	\$21,777.82
Other	\$4,739.06	\$607.68	\$2,999.73	\$14,077.60
Total Expenditures	\$1,585,014.21	\$1,992,396.08	\$1,999,533.83	\$1,787,774.76

Graduate Assistantships	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Number of Graduate Assistantships provided by the Graduate College	7	4	0	0
Number of Graduate Assistantships funded by grants	0	0	0	0
Total number of Graduate Assistantships	7	4	0	0

Are these resources sufficient to meet the degree programs instructional and scholarship needs? If not, approximately how much additional funding is needed for what specific activities? What funding sources could be reasonably increased to help the program attain its goals?

c. Program Funding

- i. Is funding from other sources sufficient to assist the program in achieving its outcomes? (Other sources include: differential tuition, grants and contracts, endowment income, and one-time gifts for student scholarships.)
 - Yes. From a big picture perspective, it is currently enough.
- ii. If not, which funding streams could be increased to help the program attain its outcomes?
 - UNLV DPT would like to raise more money for scholarships for students who have financial need. As the market for applicants tightens in the coming years, it will be important to be proactive on developing strategies to set the program apart. One way to do that is to raise more funding for scholarships to attract the top students. Program outcomes may suffer if the quality of the applicants and matriculants

are on the low end. Therefore, if scholarships can be utilized to attract the top applicants, it will help maintain and elevate our outcomes. Ultimately, by recruiting the best and brightest, it will help elevate healthcare in Nevada.

- The program is exploring opportunities to build a physical therapy clinic because a clinic is the next iteration in maintaining program quality and rank. A clinic will create new opportunities for accessing healthcare, thereby deepening community ties through the provision of vital services. It will also provide students with hands-on opportunities for professional practice under faculty supervision. Although the program does not have sufficient funds at this time, this project is an important focus of future fundraising efforts, and it is aligned with UNLV's Top Tier strategic plan, helping students succeed, while also creating community partnerships. Additionally, this will require business acumen and that is presently also needed to make this come to fruition.
- iii. What, if any, new donor revenue has been generated since the last program review?
- There have been no major changes in revenue outside of our traditional revenue streams. However, the program and development officer have raised approximately \$120,000 in funding in the last year for new student scholarships (3 small endowed scholarships).
- iv. Discuss the unit's engagement in fundraising activities during the last five years to garner support for the program. Alternatively, explain the constraints that have prevented such actions.
- The current School of Integrated Health Sciences development officer has been very proactive and successful in building relationships with prospective donors. Prior to her arrival two years ago, the department did not have stability in this position, which limited the success of fundraising activities. However, the new development officer has created better communication with prospective donors generating additional opportunities channels for fundraising.

d. Program Resources

- i. Is the quality and quantity of available consumable materials and supplies (e.g. office supplies or laboratory supplies) adequate? If not, please explain why.
- Yes.

- ii. Is the quality and quantity of available technological resources (e.g. computers, large format displays, software) adequate? If not, please explain why.
 - Yes. The program has saved money and procured financial assistance to make a major upgrade of the classroom technology in the two main lab classrooms, BHS 213 and 215. This upgrade included new projectors, new computer consoles, new technology platform integration, new smart podiums, new lavaliers, new ceiling speakers for hybrid courses and conferences, and new cameras for Panopto recordings and live webcasting.
- iii. Is the quality and quantity of other types of necessary equipment adequate? If not, please explain why.
 - Yes. However, the treatment plinths and chairs in the two main lab classrooms, BHS 213 and 215, need to be replaced in the next few years. The program is currently setting aside money in anticipation of that occurring in the next 2-3 years.
- iv. Is the quality and quantity of available library and information resources adequate? If not, please explain why.
 - Yes. This is a major strong point of UNLV infrastructure. Additionally, the medical librarian that helps UNLV DPT is very helpful.
- v. Are available program staff resources sufficient to attain the programs outcomes? If not, please explain why and state what additional staff resources are needed and how they would be funded.
 - As mentioned in a previous response, a UNLVPT faculty clinic is a major goal for the program. While the physical infrastructure is a big capital expenditure, there is a need to have at least 2 full-time clinical faculty to provide the clinical care and student training. This personnel infrastructure issue is a big capital commitment in the initial start-up of the clinic. After a few years, the clinic census will be sufficient that it will be sustainable; however, there needs to be some bridge funding in the first few years. Additionally, the program has been meeting with UNLV Health to discuss how this faculty clinic could function under the UNLV Health umbrella.

e. General Education

- i. If your program or unit offers General Education course, estimate what portion of the unit's teaching resources are allocated to those courses.
 - Not applicable as this program does not have any undergraduate courses.

- ii. Are there any factors that affect the unit's ability to offer courses for its major students? If so, please explain why.
 - Not applicable.

V. Size, Retention, Progression and Completion

a. Size of the Program

- i. Headcount, course enrollment and degree conferred data provided by the Office of Decision Support. Use the tables to answer questions below.

Headcount declared majors in Physical Therapy DPT
Plan code 'PHTDPTDPT'
Department of Physical Therapy

Term	Ph.D.
Fall 2010	86
Spring 2011	85
Fall 2011	84
Spring 2012	83
Fall 2012	87
Spring 2013	85
Fall 2013	91
Spring 2014	90
Fall 2014	96
Spring 2015	96
Fall 2015	102
Spring 2016	102
Fall 2016	104
Spring 2017	103
Fall 2017	116
Spring 2018	116
Fall 2018	127
Spring 2019	125
Fall 2019	136
Spring 2020	135
Fall 2020	138
Spring 2021	134

Headcount declared majors in Physical Therapy DPT
Plan code 'PHTDPTDPT'
Department of Physical Therapy

Term	Ph.D.
Fall 2021	140
Spring 2022	141

Department of Physical Therapy enrollments by course subject
Enrollments in DPT lecture courses by course level
Physical Therapy

Term	Level - 700
Fall 2010	542
Spring 2011	555
Fall 2011	524
Spring 2012	576
Fall 2012	562
Spring 2013	594
Fall 2013	593
Spring 2014	644
Fall 2014	629
Spring 2015	692
Fall 2015	651
Spring 2016	723
Fall 2016	669
Spring 2017	740
Fall 2017	753
Spring 2018	834
Fall 2018	861
Spring 2019	934
Fall 2019	859
Spring 2020	941
Fall 2020	893
Spring 2021	908

Department of Physical Therapy enrollments by course subject
Enrollments in DPT lecture courses by course level
Physical Therapy

Term	Level - 700
Fall 2021	796
Spring 2022	846

Source: PeopleSoft Table
 PS_LV_CNR_ENRL
 Office of Decision Support, July 2022

Enrollments in PTS lecture courses by level
Physical Therapy

Term	Level - 700
Fall 2017	7
Spring 2018	6
Fall 2018	10
Spring 2019	5
Fall 2019	3
Spring 2020	4
Fall 2020	4
Spring 2021	3
Spring 2022	38

Source: PeopleSoft Table PS_LV_CNR_ENRL
 Office of Decision Support, July 2022

Enrollments in HSC lecture courses by course level
Physical Therapy

Term	Level - 700
Fall 2020	6

Source: PeopleSoft
Table
PS_LV_CNR_ENR
L
Office of Decision
Support, July 2022

Degrees Conferred by Academic Year

Degrees conferred by Academic Year (July to June)
Physical Therapy DPT (Plan code 'PHTDPTDPT')
Doctor of Physical Therapy
Department of Physical Therapy

Academic Year	Degree Count
2006-07	17
2007-08	19
2008-09	43
2009-10	25
2010-11	30
2011-12	29
2012-13	28
2013-14	28
2014-15	28
2015-16	34
2016-17	33
2017-18	34
2018-19	34
2019-20	46

Term

Level - 700

Source: PeopleSoft Table
PS_LV_CNR_DEGREES
Office of Decision Support, July
2022

- ii. Discuss the headcount figures from the last five years. Are the trends in line with projections in your unit's strategic plan?
 - Yes. Those numbers are consistent with the current cohort size of 48 students (one cohort year for a three-year program). Several years ago, the program increased the cohort size to 48 students per year to meet demand for physical therapy personnel in Nevada. With normal attrition, it is anticipated that 45-46 students will graduate per year. This minor attrition is due to the few students who will not graduate with their cohort for personal, academic, or professional issues.
 - It should be noted that the program accreditation body (Commission on Accreditation in Physical Therapy Education (CAPTE)) will not allow programs to enroll more than the accredited and approved number. Since the program has been accredited for 48 students per cohort, it is not possible to take more without completing a substantive change report with a full accreditation review. The last time UNLVPT increased its cohort size from 36 to 48 the substantive change report was more than 800 pages long and it took than 16 months to get approved.
- iii. Does your programs enrollment trend differ from national trends? If so, please explain why.
 - No. The average cohort size in the country is 46 for all schools and 41 for public schools. So, the current cohort size of 48 is in the upper half of public schools and about average for all programs.

b. Major Course Offerings

- i. Does the program offer enough course to meet enrollment demands? If so, please explain why.
 - Yes. The curriculum is lock-step which means that the schedule of each cohort is set for all three years of the program and all of the students of the cohort take the exact same classes at the same time and in the same sequence. Subsequently, the program course offerings are planned out well in advance and are sufficient for accreditation needs.
- ii. How many major courses have been added or eliminated in the last five years?

6 courses were added and 4 were eliminated.
- iii. Why were these actions taken?
 - These curricular changes were done to update and contemporize the curriculum to keep up pace with an evolving and expanding healthcare environment. In particular, there was a need to increase content related

to professionalism and psychosocial issues including health disparities and population health.

- iv. What additional actions should be taken to improve retention, progression and graduation of students in the program?
 - For students that matriculate into the program, 94.6% graduate from the program, an excellent graduation rate. One of the main reasons for this is that the program outcomes, program cost, and recruitment policies and procedures have allowed the program to attract and admit high performing students.
 - When reviewing student demographics and performance, a disproportionate number of students from underrepresented populations were being dismissed for academic reasons. Subsequently, a remediation plan was implemented to give students a second chance. This program has been very successful in helping dismissed students to re-enter the program after completion of an individualized plan involving self-reflection and acquiring new learning and studying skills/tools. Since it was implemented 5 years ago, 8 students who were dismissed from the program for academic reasons have been remediated, readmitted, and graduated.
- v. Are there courses that represent barriers for progression and/or graduation, because students routinely have difficulty enrolling in, and/or completing those courses? If so, please explain why.
 - No.
- vi. If there are course that represent barriers for progression and/or graduation, please describe financially-based and non-financially-based solutions to reduce “bottle-necks” in these courses.
 - There are no issues with enrollment bottle necks as the courses are lock-step.
- vii. Can any changes in sequencing of courses be made to facilitate student retention, progression and graduation?
 - There has been extensive discussion and strategic planning among the faculty and with students about the blend of courses, semester workloads, and vertical integration of courses. At present, faculty and students are collectively satisfied with the sequence of coursework and feel that the semester-to-semester blend and workload sets the students up for success and progression.

- viii. Please discuss whether the unit has any plans to provide any or more online courses within the next 2-3 years. If the unit does not have such plans please explain why.
- The program does not have plans to build additional online courses in the immediate future. Almost a third of program courses are in-person lab courses, requiring attendance in a lab and lecture on the same day. As such, it does not make sense to have the students come for an in-person lab, followed by an online course (or vice versa) on the same day. With up to 5 courses in one day and 1-2 of those being labs, it would be a scheduling challenge and a logistical problem that is not in the best interest of the students.

c. Curriculum

- i. Is the programs curriculum aligned with current developments in the discipline? If so, please explain how.
- Yes. The overall curriculum was recently overhauled to contemporize the blend and content of courses and to assign the appropriate number of credits based on developments in healthcare and the profession of physical therapy. Therefore, the overall curriculum has been sufficiently recalibrated and is contemporary. For example, the following are some examples of the changes that were made:
 - Increased the number of professional development courses from one to three. We have recognized that learning the knowledge and skills related to physical therapy practice is important. However, we also feel that professionalism does not just happen. It needs a curriculum, intentionality, and purpose. We believe that professionalism in physical therapy starts the first day of class (e.g., attendance/tardiness policies, dress code and appearance policies, communication policies); however, there are many aspects of professionalism that need to be taught and developed and that is the intent of these additional courses.
 - Brought forward our psychosocial class (now Professional Development II) to the first semester in the program to highlight its importance and to allow the classes that follow the ability to incorporate psychosocial concepts into their teaching and case studies. In the past, this course felt like an after thought and came late in the curriculum.
 - Added credits to our musculoskeletal and neurorehabilitation tracks. We removed credits from pathophysiology and neurophysiology to accommodate this shift.

- Women’s health was moved into the musculoskeletal track with a changing emphasis to pelvic health rather than “women’s health.”
 - Combined cardiopulmonary rehabilitation with acute care rehabilitation courses since there was overlap and shared content.
 - All of the faculty attend at least one continuing education course or conference in their teaching content area each year and incorporate new content into their courses. There are two specific faculty goals (within our overall program goals for faculty) that address this:
 - Goal #2. To keep current with the evidence in physical therapy and to regularly update coursework so that it is consistent with current evidence.
 - Goal #3. To maintain the highest standard of physical therapy education by improving teaching skills and keeping coursework consistent with APTA educational standards.
- ii. If the program curriculum is not aligned with current developments in the discipline, please explain what steps faculty are taking to modernize the curriculum.
 - This is a major program focus and all of the faculty are aligned with maintaining contemporary expertise in their teaching content domain and to stay abreast of evidence-based practice. Additionally, it should be noted that faculty are required to maintain a Nevada physical therapy license which requires yearly continuing education courses.

d. Advising

- i. How many full-time academic advisors are available at the Colleges Advising Center? Is this number sufficient?
 - There are no academic advisors assigned to the physical therapy program from the School of Integrated Health Sciences. Instead, each faculty member is the academic advisor for 4-5 students per cohort (12-15 total students per year, per faculty, to cover the 3 cohorts). This is a challenge for the faculty as it absorbs a fair amount of time but there are no other suitable options. The program does fund a Student Affairs Coordinator who handles pre-admission advising, recruitment, and admissions; however, she does not have enough time to handle academic advising of students once they have matriculated into the program.
- ii. Describe any changes to advising practices in the last five years based on the findings of assessment reports.
 - There have been no changes to the academic advising practices in the last 5 years.

e. Graduation Rates

- i. Program graduation numbers and rates are summarized below (insert here tables with graduation data). Use the tables to answer the below questions.
 - o Please see Appendix B for historical graduation data (94.6% graduation rate from students that matriculated into the program).
- ii. Are the trends in 6-year cohort graduation close to the University's goal of 50% graduation rate?
 - o Yes. The graduation rates are well above the UNLV rates for undergraduates but that is not an appropriate comparison. While our graduation rate is strong, it should be compared to other graduate professional programs at UNLV. Unfortunately, we do not have those data.
- iii. If not, what is being done to reach the 50% graduation rate?
 - o Not applicable.

VI. Quality

a. Admission and Graduation Requirements

- i. List program admission requirements as they appear in the current UNLV academic catalog.
 - o The following are the program requirements as listed in the UNLV academic catalog:
 - o *The following requirements are considered for admission into the Doctor of Physical Therapy program:*
 - *Prior to entering the program, candidates must complete prerequisite courses and earn a baccalaureate degree from an accredited college or university. There is no preference given to any particular baccalaureate degree.*
 - *A minimum overall undergraduate grade point average of 3.0 on a 4.0 scale with a minimum average of 3.0 on a 4.0 scale for prerequisite courses.*
 - *A composite score of 300 or higher on the verbal and quantitative sections of the Graduate Record Examination (GRE) is preferred. A score of 4 out of 6 is recommended on the Analytical Writing Section of the GRE.*
 - *Students must apply to the DPT program via the new Physical Therapy Centralized Application Service (PTCAS). Only applications from PTCAS will be considered. Please use the URL www.ptcas.org to complete your application.*
 - o *The following are required with your application to PTCAS:*
 - *Three letters of recommendation. Two of the letters need to be from a licensed physical therapist who can evaluate the*

applicant's potential as a student in the physical therapy program. The remaining letter can be from a former professor or employer.

- *An autobiographical statement of approximately 300 words describing the student's professional goals and reasons for seeking graduate education in physical therapy.*
- *Knowledge of the field through actual work or volunteer experience (a minimum of 100 hours or more divided among hospital and outpatient facilities). Additional hours in diversified settings are strongly recommended.*
- *An interview will be required.*
- *Information to be submitted to the Graduate College:*
 - *Complete and submit the Graduate College online application for admission, with appropriate fees.*
 - *Official transcripts from all previous college and professional schools.*
- *The program is open to qualified applicants without regard to race, color, religion, sex, sexual orientation, age, national origin, marital status, or the presents of any physical, sensory, or mental disability.*
- *Prerequisite Courses:*
 - *In addition to completing the requirements of a baccalaureate degree, applicants must have completed or be able to complete the necessary specific hours of prerequisite course work with a grade of at least a C prior to admission to the program. Grades below a C in prerequisite courses will not be accepted. No more than two prerequisite science courses should be in progress or incomplete and all prerequisite science courses must be completed by the end of the spring semester (quarter) prior to commencing the program. Those students in the process of fulfilling the requirements of a prerequisite course must realize that their acceptance into the program is contingent upon satisfactory completion of that course during the application process.*
 - *Courses taken on a pass-fail basis may not fulfill prerequisite requirements. Prerequisite course work must have been completed within 10 years from application cycle to fulfill requirements, which are as follows:*
 - *One year of lecture-based biology courses*
 - *One year of laboratory and lecture-based anatomy and physiology courses*
 - *One year of laboratory and lecture-based inorganic chemistry*
 - *One year of laboratory and lecture-based physics*

- *One year psychology (introduction to psychology and one semester of either child, adolescent, developmental or abnormal psychology)*
 - *One semester statistics*
- ii. List any updates that need to be made to the undergraduate or graduate academic catalogs.
- There are no updates needed for the catalog.
- iii. Have these changes been initiated in Curriculog?
- Not applicable.

b. Outcomes and Assessment

- i. Student Learning Outcomes and Program Assessment Plans and Reports by program concentration are available through the [Office of Academic Assessment](#). Attach the most recent assessment report in the Appendix
- UNLV DPT's 2022 report is attached in Appendix C.
- ii. As a result of information gathered in your assessment reports, has the program revised its curriculum (e.g. changing prerequisites, adding or eliminating required or elective courses, or co-curricular experiences for the degree(s)) in the last five years? If so, what changes were made and why?
- The current curriculum was implemented for students who began the program in 2020 or later. The results from yearly graduate exit surveys were used to assist in the changes and design of the new curriculum that is in current use. For example, students often reported feeling unprepared in women's health content which was previously a standalone course (DPT 789). The solution was to integrate this content throughout DPT 741, DPT 754, DPT 785, and DPT 789 to allow for increased exposure. Students historically reported unpreparedness in cardiopulmonary and so DPT 770 was moved from a 1 credit standalone course on cardiopulmonary rehabilitation to an expanded 3-credit course that now includes acute care rehabilitation. Student surveys have also have indicated that they need more confidence in business administration and so 1 credit was added to DPT 772 Physical Therapy Administration.
 - Students have been surveyed since the introduction of the new curriculum and changes have already been put into action. For example, DPT 748 Pharmacology was originally placed into the Summer II curriculum. After feedback from the first cohort of students and faculty, this course was moved out of the summer and placed into the following spring semester.

- Student surveys are not the only type of assessment that has affected the curriculum. Faculty discuss the curriculum on a regular basis in faculty meetings. Based on faculty input, changes have been made. For example, DPT 774 Psychosocial Aspects of Physical Therapy was increased from 2 credits to 3 credits to add information on healthcare disparities. The faculty also decided that the elective course, DPT 793 Seminar, was not a useful addition and should be eliminated to streamline curriculum.
- iii. Describe how the program has revised course content or pedagogical approaches based on findings in its assessment reports in the last five years?
- The pedagogical style of the program generally follows the pattern of in class lecture combined with separate laboratory classes where students get the opportunity to put their knowledge into practice. Still, a small percentage of classes have moved to a flipped classroom style, utilizing recorded lectures and allowing for more knowledge integration during the time together in class. The classes utilizing a flipped method include DPT 742, DPT 754, DPT 748, and DPT 752. The courses DPT 730 and DPT 750 are partially flipped. In the past 5 years, faculty have adopted a shift in their style for classroom student assessment. Recently, an in-service was held at a faculty meeting on diversifying our modes of classroom assessment to encourage including assignments and alternate learning experiences in addition to multiple choice exams.
 - Pedagogical approaches are consistently being changed and assessed within our department. A big change within the last 5 years has been the inclusion of technology. Many courses use some technologically based resource to support student learning and the students have responded favorably to these changes which is evident in course evaluations.
 - The program has a 100% overall pass rate on the National Physical Therapy Exam since its inception. This shows that the program is preparing students well for clinical practice and no large changes are required (Appendix B).
 - In addition to a passing score on the national exam, the program tracks specific student learning outcomes. A high proportion, >95% from the class of 2021, felt well prepared across all 10 learning outcomes (Appendix D).
- iv. Describe how you have used the findings in one assessment report to improve student learning.
- The yearly assessment report has guided meaningful change over the last 5 years. For example, changes within the curriculum and faculty

development have led to an improvement in the students' perception of preparation in multiple areas. For example, in 2017 the graduate exit survey showed 49% of students felt prepared in cardiopulmonary physical therapy. Following strategic changes, 97% of the class of 2022 reported feeling prepared. This same attention was given to our specialty courses which had a 5-year improvement from 59% satisfaction to 83% satisfaction. In addition, the neuro content area had an improvement from 65% to 89% satisfaction. Overall, students have reported improved satisfaction in all 5 diagnostic content areas (Appendix E).

- This yearly assessment has also guided changes in UNLV DPT courses related to intervention content areas. With an improvement in cardiopulmonary from 32% satisfaction in 2017 to 97% satisfaction in 2021 and an improvement in neuro from 57% to 94% satisfaction, respectively (Appendix E).

VII. Conclusion and Self-Assessment

a. Faculty Review of Self-Study

- i. On what date did the program and/or department faculty review this self-study?
 - The UNLVPT faculty reviewed the content of this self-study report on January 9, 2023 at the annual Spring Retreat.

b. Conclusions

- i. What are the top three priorities and/or needs for the future development of the program?
 - New tenure track faculty line
 - Faculty clinic with clinical faculty lines
 - New programs (DPT/MBA and DPT/MHA, Sports Medicine Residency Program)
- ii. What are the strengths of the program?
 - Strong national reputation as evident in USNWR ranking of #57
 - Excellent outcomes (100% pass rate on board exams, 100% one-year employment rate, high matriculation rate (60%) for offers, high graduation rate (95%)) relative to all PT programs and aspirational peers
 - Relatively inexpensive compared to regional competitive programs
 - Culture of excellence among the faculty and students
 - High level of teaching expertise (6 faculty have won SIHS Teacher of the Year Awards)
 - Research productivity among faculty (average of 36.75 publications per year for the department)

- Student research involvement
- iii. What are the challenges facing the program?
- Program proliferation in the intermountain west and another new program in Las Vegas.
 - Decrease in future applications expected
 - Decrease quality of applicants expected.
 - Recruiting and retaining a student body that reflects the diversity of the community we serve.
 - Space (team-based learning classroom, interprofessional education, decent size auditorium for larger events)
- iv. Provide any additional comments about the program.
- No additional comments.

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
Class of 2010 Class of 2011	Differences in longitudinal trajectory patterns in children with and without developmental delay	Beatriz Alcalá Jennifer Lawrence	Hickman			
	An analysis of longitudinal developmental data of young children to determine relationships and interactions among developmental domains	Gavin Hillman Keoni Kins	Hickman			
	Relationship Between Activity and Falls in Individuals Dwelling in Assisted Living Facilities	Laura Bareuther Angela Bestwick Jonathan Ewing Michael Gilroy	Young			
	The reliability of static rearfoot, forefoot and navicular drop measurements and their use in predicting dynamic foot pressures during gait	Kelley Rutherford Lauren Teske Jonathan Wright	Wallmann			
	A real-time ultrasound examination of the immediate effects of lumbar spine manipulation on contraction of transversus abdominis in asymptomatic subjects	Kimberly Hurt Melissa Meissner Joshua Mills	Puentedura	Puentedura EL, Landers MR, Hurt K, Meissner M, Mills J, Young DL. Immediate effects of lumbar spine manipulation on the resting and contraction thickness of transversus abdominis in asymptomatic individuals. <i>Journal of Orthopaedic & Sports Physical Therapy</i> . 2011;41:13-21.	Puentedura EJ, Hurt KA, Meissner MC, Mills JD, Young DL, Landers MR. A real-time ultrasound examination of the immediate effects of lumbar spine manipulation on the contraction of transversus abdominis in asymptomatic subjects. <i>Physical Therapy 2010: Annual Conference & Exposition of the American Physical Therapy Association</i> , Boston, Massachusetts, June 16-19, 2010.	
	The Relationship Between Hip and Knee Muscle Strength, Dynamic Knee Valgus Angle, Gait Characteristics, Balance, and Hip and Lumbar Spine Bone Mineral Density in Women Who Are Postmenopausal	Trustin Anderson Lindsay Appuglise Chandler Squire	Schuerman		Schuerman S, Appuglise L, Anderson T, Squire C. An Exploratory Study on the Dynamic Q-Angle as a Potential Risk Factor for Osteoarthritis in Postmenopausal Women: Relationships with Lower Extremity Strength, Gait, and Balance. Poster submitted, accepted, and presented for APTA: CSM 2011. 2/11/11. New Orleans, LA.	
	Employment trends of resident and non-resident physical therapy graduates in largely underserved states: a pilot study	Christine Burford Steve Fairbanks Ashley Ingram	McWhorter		McWhorter JW, Landers MR, Burford C, Fairbanks S, Ingram A. Employment trends of resident and non-resident physical therapy graduates in underserved states. 2011 APTA Combined Sections Meeting, New Orleans, LA, February 9-12, 2011.	
	Reasons for patient non-participation in physical therapy in the acute care setting	Robert Arata Mandy Enerson Clark Johnson	Young	Young DL, Arata R, Enerson M, Johnson C. Rates and Reasons for patient non-participation in physical therapy in the acute care setting. <i>PTJ-PAL</i> . 2011; 11(3): J10-J18	Young DL, Arata R, Enerson M, Johnson C. Rates and Reasons for patient non-participation in physical therapy in the acute care setting. <i>APTA Annual Conference 2010</i> .	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Thrust joint manipulation education: student perceptions of learning and practical experiences in spinal manipulation within entry-level physical therapist education programs	Lisa Basl Josh Marks	Puentedura			
Class of 2011 Class of 2012	The acute effects of various types of stretching (static, dynamic, ballistic, no stretch) of the iliopsoas on 40 yard sprint times in non-athletes	Scott Christensen Ryan Resnik Craig Perry	Wallmann			
	Employment selections of resident and non-resident graduates of physical therapy programs in underserved western states	Trever Cornia Ryan Dutot Jake Parsons Katie Swart	McWhorter			
	Effects of environment on children’s motor scores, eligibility status, and administration times	Derrick Mittelstadt Abigail Parker Kirsten Pickett Heather Temkin	Hickman	Hickman R, Mittelstadt D, Parker A, Pickett K, Temkin H. Effects of environment and personal factors on motor skill test scores and administration time in young children. Combined Sections meeting APTA, New Orleans, LA, February 2011		
	Safety of cervical spine manipulation: are adverse events preventable and are manipulations performed appropriately?	Joe Anders Jessica March Amber Perez	Puentedura	Puentedura EL, March J, Anders J, Perez A, Landers MR, Wallmann HW, Cleland JA. Safety of cervical spine manipulation: are severe adverse events preventable and are manipulations being performed appropriately? a review of 134 case reports. Journal of Manual & Manipulative Therapy. 2012;20:66-74.	Puentedura EL, Anders J, March J, Perez A, Safety of cervical spine manipulation: are severe adverse events preventable and are manipulations being performed appropriately? a review of 134 case reports. 2011 APTA Combined Sections Meeting, New Orleans, LA, February 9-12, 2011.	
	Patient factors influencing physical therapy non-participation in the acute care setting	Dan Goodrich Curt Jensen	Young	Young DL, Jensen C, Goodrich D, Shan G. Physical Therapy Nontreatment Events in the Acute Hospital Setting: A Descriptive Study. J Acute Care Phys Ther. 2015;6(1).	Young DL, Jensen C, Goodrich D, Shan G, Physical Therapy Non-Treatment Events in an Acute Hospital: a Descriptive Study. APTA Combined Sections Meeting. Las Vegas, Nevada, January 2014	
	Examining activity levels and motor performance: a comparison of healthy weight and overweight children to their parents and peers	Aaron Copeland Maresa Madsen Riley Phelps Brandon Richards	McWhorter /Hickman		McWhorter JW, Hickman R, Walker MC. Examining activity levels and motor proficiency: a comparison of healthy weight and overweight children to their parents. Combined Sections Meeting, APTA Las Vegas, NV, February 2014	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Development of a scale to assess fear-avoidance behavior due to falling: the fear of falling avoidance behavior questionnaire (FFABQ)	Cortney Durand Shalom Powell	Landers	Landers MR, Durand C, Powell S, Dibble L, Young D. Development of a scale to assess fear-avoidance behavior due to falling: the fear of falling avoidance behavior questionnaire (FFABQ). <i>Physical Therapy</i> . 2011;91:1253-1265.	Landers MR, Durand C, Powell S, Dibble L, Young D. Development of a scale to assess fear-avoidance behavior due to falling: the fear of falling avoidance beliefs questionnaire (FFABQ). 2011 APTA Combined Sections Meeting, New Orleans, LA, February 9-12, 2011.	Landers MR, Durand CS, Powell DS, Kuiken AM, Young DL. Balance confidence and fear of falling avoidance behavior are most predictive of falling in older adults: a prospective analysis. Joint World Congress of ISPGR and Gait & Mental Function, Trondheim, Norway, June 24-28, 2012.
	The Acute Effects of Static Stretching of the Gastrocnemius on Limits of Stability in Young Adults versus Elderly Adults	Matt Bugnet Kirk Player	Wallmann			
	A real-time ultrasound examination of the lumbar multifidus immediately following three physical therapy interventions in asymptomatic subjects	Victoria Byers Steven Lim Katy Rice	Puentedura			
	Attentional focus during balance training in idiopathic Parkinson's disease (PD): a randomized clinical trial	Leslee Rosenlof Alyssa Davis Rebecca Blazer Amanda Richards	Landers	Landers MR, Hatlevig RM, Richards AR, Davis AD, Rosenlof LE. Does attentional focus during balance training in people with Parkinson's disease affect outcome? A randomised controlled clinical trial. <i>Clinical Rehabilitation</i> . 2016;30(1):53-63.	Landers MR, Blazer R, Richards A, Davis A, Rosenlof L. Attentional focus during balance training in idiopathic Parkinson's disease: a randomized clinical trial. 2012 APTA Combined Sections Meeting, Chicago, IL, February 8-11, 2012.	
Class of 2012 Class of 2013	Therapist characteristics influencing physical therapy non-treatment in the acute care setting	Colby Olsen Aaron Van Wagoner Dan McGarvey	Young			
	A population-based survey of lumbar surgery beliefs in the United States	Zachery Rasmussen Amanda McCauley	Puentedura Landers	Landers MR, Puentedura EL, McCauley A, Rasmussen Z, Louw A, Bungum T. A population-based survey of lumbar surgery beliefs in the United States. <i>Orthopaedic Nursing</i> . 2014;33;207-216.	Puentedura E, Landers MR, McCauley A, Rasmussen Z, Louw A. A population-based survey of lumbar surgery beliefs. 2012 APTA Combined Sections Meeting, Chicago, IL, February 8-11, 2012.	
	Supervised lower extremity strengthening program to improve function in women over fifty with knee osteoarthritis: a time series design	Janelle Lemons Diane Sheesley Reagan Sutton	Schuerman		Schuerman S, Lemons J, Sheesley D, Sutton R. Supervised lower extremity strengthening program to improve function in women over fifty with knee osteoarthritis: a time series design. Poster. CSM 2012, Chicago, IL.	
	Kinesio taping on short-term changes in shoulder strength in healthy adults: a randomized clinical trial	Cristobal Cordova Dario Callegari Julia Dunievitz	Wallmann			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Active recovery and electro-muscular stimulation on delayed onset muscle soreness after endurance running: a randomized clinical trial	Amanda Gramly Kitrick Rhodes Andrea Smith	Landers		Gramly A, Rhodes K, Smith A, Landers MR. Active recovery and electro-muscular stimulation on delayed onset muscle soreness after endurance running: a randomized clinical trial. PT 2012: APTA's Annual Conference and Exposition. Tampa, FL, June 6-9, 2012.	
	Foot volume change during long distance running in healthy adults	Meghan Boni Istvan Takacs Rebecca Wilson	McWhorter			
	Immediate effects of high intensity training in children with cerebral palsy GMFCS Levels I-III: a pilot study	Andrea Kuiken Andrea Blahovec Jillian Mears Heather Riggins	Hickman	Hickman R, Dufek JS, Lee SP, Blahovec A, Kuiken A, Riggins H, McClellan J. Feasibility of Using a Large Amplitude Movement Therapy to Improve Ambulatory Function in Children with Cerebral Palsy Physiotherapy Theory & Practice (in review)	Hickman R, Dufek J, Blahovec A, et al. Immediate effects of high intensity training in children with cerebral palsy: a pilot study. Annual Conference APTA, Tampa, FL, June 2012	
	Duration of the effects of 3 static hamstring stretching conditions with or without a dynamic warm-up in college age adults.	Spencer Blackwell Andrew Blomberg Jonathan Griffith	Wallmann			
	Test-retest reliability and responsiveness of dynamic visual acuity and gaze stability in high school and college football players.	Mallory Puckett Mitchell Smith Denise Kaufman	Landers	Kaufman DR, Puckett MJ, Smith MJ, Wilson K, Cheema R, Landers MR. Test-retest reliability and responsiveness of dynamic visual acuity and gaze stability in high school and college football players. Physical Therapy in Sport. 2014;15;181-188.	Kaufman D, Puckett M, Smith M, Landers MR. Test-retest reliability and responsiveness of gaze stability and dynamic visual acuity in high school and college football players. 2013 APTA Combined Sections Meeting, San Diego, CA, January 21-24, 2013.	
Class of 2013 Class of 2014	Reliability and validity of the NE1 wound assessment tool (WAT)	Stephanie Coon Faustina Tran Melinda Vicencio	Young		Tran F, Young DL, Vicencio M, Coon S, Reliability and validity of a tool to improve wound assessment. APTA Combined Sections Meeting. Las Vegas, Nevada, January 2014	
	Therapeutic neuroscience education for patients with chronic low back pain and its effect on activity level, pain perception, and function	Amber Domingo Ryan Spencer Stephen Burton	Puenteudura			
	Land-based exercise and its effect on quality of life outcomes in patients with knee osteoarthritis	Cody Buckner Lindsay Martin Michael Soukup	Schuerman			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	The acute effects of upper extremity stretching on throwing velocity in untrained baseball throwers	Michael Williams Lanisa Harveson Jason Melton Ashley Delobe	Puentedura	Williams M, Harveson L, Melton J, Delobel A, Puentedura EJ. The acute effects of upper extremity stretching on throwing velocity in baseball throwers <i>Journal of Sports Medicine</i> . 2013		
	Anterior cervical decompression and fusion on neck range of motion, pain and function: a prospective analysis	Kate A. Addis Jason K. Longhurst Bree-lyn vom Steeg	Landers	Landers MR, Addis KA, Longhurst JK, vom Steeg B, Puentedura E, Daubs M. Anterior cervical decompression and fusion: a prospective analysis on neck range of motion, pain and function. <i>The Spine Journal</i> . 2013;13:1650-1658.	Landers MR, Addis K, Longhurst J, vom Steeg B, Puentedura E, Daubs M. Anterior cervical decompression and fusion improves neck range of motion: a prospective analysis. 2014 APTA Combined Sections Meeting, Las Vegas, Nevada, February 3-6, 2014.	
	Characteristics of subjects who avoid activities and participation due to a fear of falling in Parkinson's disease	Russell Gourlie Spencer Sorensen Rithea Vong	Landers	Landers MR, Lopker M, Newman M, Gourlie R, Sorensen S, Vong C. A cross-sectional analysis of the characteristics of individuals with Parkinson's disease who avoid activities and participation due to a fear of falling. <i>Journal of Neurologic Physical Therapy</i> . 2017;41(1):31-42.	Landers MR, Lopker M, Newman M, Gourlie R, Sorensen S, Vong R. Characteristics of subjects who exhibit avoidance behavior due to a fear of falling in Parkinson's disease. 2015 APTA Combined Sections Meeting, Indianapolis, Indiana, February 4-7, 2015.	Landers MR, Lopker M, Newman M, Gourlie R, Sorensen S, Vong R. Individuals with Parkinson's disease who report fear of falling avoidance behavior exhibit more depression, anxiety, and catastrophization than non-avoiders. 18th International Congress of Parkinson's Disease and Movement Disorders, Stockholm, Sweden, June 8-12, 2014.
	Effects of Cervical Spine Manipulation on Balance and Joint Proprioception in Asymptomatic Individuals: Plausibility and Pilot Study	Kimberly Drayer Michael Kauwe	Puentedura			
	Effects of foot strike on low back posture, shock attenuation and comfort in running	Traci Delgado Emilia Kubera-Shelton Rob Robb	Hickman	Delgado TL, Kubera-Shelton E, Robb RR, Hickman R, Wallmann HW, Dufek JS. Effects of foot strike on low back posture, shock attenuation, and comfort in running. <i>Med Sci Sport Exerc</i> . 2013; 45:490-496	Delgado TL, Kubera-Shelton E, Robb RR, Hickman R, Wallmann HW, Dufek JS. Effects of foot strike on low back posture, shock attenuation, and comfort in running. Combined Sections Meeting, APTA San Diego, CA January 2013	
	The Effects of Thrust Joint Manipulation on the Resting and Contraction Thickness of Transversus Abdominis in Patients with Low Back Pain	Shawna Bohnet Jaclyn Durant Jade Elkind	Puentedura		Fosberg K, Bohnet S, Durant J, Elkind J, Puentedura EJ. The Effects of Thrust Joint Manipulation on the Resting and Contraction Thickness of Transversus Abdominis in Patients with Low Back Pain. 2015 APTA Combined Sections Meeting, Indianapolis, Indiana, February 4-7, 2015.	
Class of 2014 Class of 2015	Development of A Tool to Assess Children's Perceptions of Their Own Balance (The Pediatric Balance Perception Battery): A Pilot Study	Ashlee Harmon Jillian Beckett	Hickman Landers		Hickman R, Landers MR, Beckett J, Harmon A. Development of a balance self-perception assessment tool for children: Pilot Study of the Pediatric Balance Perception Battery. 2015 APTA Combined Sections Meeting, Indianapolis, Indiana, February 4-7, 2015.	
	Blended Pedagogy Pathophysiology Course: Effectiveness and Student Satisfaction	Betsy Botsford Samantha Corn Alanna Keenan	Young			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	The Effect of Trigger Point Dry Needling to the Multifidus Muscle on Resting and Contracted Thickness of Transversus Abdominis in Healthy Subjects	Sarah Buckingham Crystal Montoya Daniella Morton	Puentedura	Puentedura EJ, Buckingham SJ, Morton D, Montoya C, Fernandez de Las Penas C. Immediate Changes in Resting and Contracted Thickness of Transversus Abdominis After Dry Needling of Lumbar Multifidus in Healthy Participants: A Randomized Controlled Crossover Trial. J Manipulative Physiol Ther. 2017 Oct;40(8):615-623.	Puentedura EJ, Buckingham S, Montoya C, Morton D. The effect of Trigger Point Dry Needling to the Multifidus Muscle on Resting and Contracted Thickness of Transversus Abdominis in Healthy Subjects. 2015 APTA Combined Sections Meeting, Indianapolis, Indiana, February 4-7, 2015.	
	Ability of Ages and Stages Questionnaire 3rd Edition to Identify Children in Need of Comprehensive Motor Evaluation	Courtney Carmichael Elizabeth Willison Qing Zhang	Hickman		Hickman R, Carmichael C, Willison E, Zhang Q. Ability of ASQ-3 to identify children in need of comprehensive motor evaluation. Section on Pediatrics Annual Conference, St. Louis, MO, October, 2014.	
	The Effects of A Progressive Exercise Program on Functional Activity and Quality of Life for Older Overweight Women with Knee Osteoarthritis	Tyler Carlson Devin Edvalson Tyler Peck Brad Robison	Schuerman			
	Conceptual Framework of A Novel Intervention to Improve Mobility in Children with Cerebral Palsy: the Successes and Challenges of Implementing A Large Amplitude Movement Protocol	Tania Goodwill Erin Jarrett Beren Shah Alanna Stockford	Hickman Lee			
	Validation of a tool for improved pressure ulcer staging by the non-expert in the live patient	Janelle Borg Carrie Johnston Megan Lucke Jordan Sinclair	Young		Young DL, Borg J, Johnston C, Lucke M, Sinclair J, Estocado N. Validation of a tool for improved pressure ulcer staging by the non-expert in the live patient. APTA Combined Sections Meeting. Las Vegas, Nevada, January 2014	
	Characteristics of Subjects who Avoid Activities and Participation due to A Fear of Falling in Parkinson's Disease	Morgan Lopker Molly Newman	Landers	Landers MR, Lopker M, Newman M, Gourlie R, Sorensen S, Vong C. A cross-sectional analysis of the characteristics of individuals with Parkinson's disease who avoid activities and participation due to a fear of falling. Journal of Neurologic Physical Therapy. 2017;41(1):31-42.	Landers MR, Lopker M, Newman M, Gourlie R, Sorensen S, Vong R. Characteristics of subjects who exhibit avoidance behavior due to a fear of falling in Parkinson's disease. 2015 APTA Combined Sections Meeting, Indianapolis, Indiana, February 4-7, 2015.	Landers MR, Lopker M, Newman M, Gourlie R, Sorensen S, Vong R. Individuals with Parkinson's disease who report fear of falling avoidance behavior exhibit more depression, anxiety, and catastrophization than non-avoiders. 18th International Congress of Parkinson's Disease and Movement Disorders, Stockholm, Sweden, June 8-12, 2014.
Class of 2015 Class of 2016	Prevalence and risk factors for neck and shoulder musculoskeletal symptoms in users of touch-screen tablet computers	Betina Bair Mariana Gama Marissa Toberman	Lee	Lee SP, Hsu YT, Bair B, Gama M, Toberman M. Prevalence and Risk Factors for Neck and Shoulder Musculoskeletal Symptoms in Users of Touch Screen Tablet Computers. Submitted Journal of Physical Therapy Science (2018).	Lee SP, Bair B, Gama M, Toberman M, Hsu YT. Prevalence and Risk Factors for Neck and Shoulder Musculoskeletal Complains in Users of Tablet Computers. Proceedings of the America Physical Therapy Association Combined Sections Meeting, Anaheim, California, USA, 2016.	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Immediate effects of cervical spine manipulation on gait parameters in individuals with and without mechanical neck pain	Jordan Isom Shaylyn Kennedy Justin May Sam Moore	Puentedura			
	Comparing usability and agreement of low- and high- technology approaches to gait analysis in healthy adults	John McConnell Brian Silverman	Hickman			
	Four weeks of minimalist style running training reduced lumbar paraspinal muscle activation during shod running	Stephanie Barton David Brown Talia Joyce	Lee	Lee SP, Bailey J, Armour Smith J, Barton S, Brown D, Joyce T. Minimalist Style Running Affects Lumbar Posture and Paraspinal Muscle Activation. <i>Physical Therapy in Sport</i> (in press, available online, 2016).	Lee SP, Barton S, Brown D, Joyce T, Bailey J. Four Weeks of Minimalist Style Running Training Led to Reduced Lumbar Paraspinal Muscle Activation during Shod Running. Proceedings of the America Physical Therapy Association Combined Sections Meeting, Anaheim, California, USA, 2016.	
	Do the physical therapist's words really matter?: the effects of enhanced and decreased expectations on balance performance in those with and without Parkinson's disease	Jacob Blood Joshua Ostrander Granuaile Parrish	Landers		Landers MR, Blood J, Ostrander J, Parrish G. Do the physical therapist's words really matter?: The effects of enhanced and decreased expectations on balance performance in those with and without Parkinson's disease. APTA Combined Sections Meeting, Anaheim, CA, February 17-20, 2016.	
	Comparing functional motor control and gait parameters in children with autism to that of age-matched peers who are typically developing	Chris Ancell Jillian May Samantha Novotny Patricia Stevenson	Hickman			
	The immediate effects of cervicothoracic manipulation versus stretching on upper trapezius pressure pain thresholds and range of motion in individuals without neck pain	Kevin Carr Morgan King Erin Oelklaus Brendan Parry	Puentedura	Hanney WJ, Puentedura EJ, Kolber MJ, Liu X, Pabian PS, Cheatham SW. The immediate effects of manual stretching and cervicothoracic junction manipulation on cervical range of motion and upper trapezius pressure pain thresholds. <i>Send to J Back Musculoskelet Rehabil.</i> 2017 Sep 22;30(5):1005-1013. doi: 10.3233/BMR-169573.		
	The effects of instruction on landing strategies in female college-aged dancers and non-dancers: a pilot study	Brittany Keating Jason Pyfer Kim Vialpando	Turner; Lee	Turner CL, Lee SP, Vialpando K, Keating B, Pyfer J, Crowther T, Crow S, Saupan T. Preventing Non-Contact ACL Injuries in Female Athletes: What Can We Learn from Dancers? <i>Physical Therapy in Sport.</i> 2018;31: 1-8. doi:10.1016/j.ptsp.2017.12.002	Turner C, Lee SP, Keating B, Pyfer J, Vialpando K. The effects of instruction on landing strategies in female college-aged dancers and non-dancers: a pilot study. APTA CSM. Anaheim, February 2016. Platform presentation.	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Patient no-show for outpatient physical therapy: a national survey	James Bokinskie Payton Johnson Trevor Mahoney	Young	Bokinskie J, Johnson P, Mahoney T, Young DL. Examination of the failure of patients to show for scheduled appointments in outpatient physical therapy settings: A national survey. <i>Physical Therapy Journal of Policy, Administration, and Leadership (PTJ-PAL)</i> . Sept 2016;16(2):J1-J10	Bokinskie J, Johnson P, Mahoney T, Young DL. No-show rates and policies among outpatient physical therapy clinics. APTA Combined Sections Meeting. Indianapolis, IN, February 2015	
	The effects of patellofemoral taping on patellofemoral joint alignment and contact area	Ryan Epstein Ron Garcia Nicole Riley	Ho	Ho KY, Epstein R, Garcia R, Riley N. Effects of patellofemoral taping on patellofemoral joint alignment and contact area. <i>Journal of Orthopaedic & Sports Physical Therapy</i> . 2017; 47 (2): 115-123.	Epstein R, Garcia R, Riley N, Lee SP, Turner C, Ho KY. The effects of patellofemoral taping on patellofemoral joint alignment and contact area. <i>2016 APTA Combined Sections Meeting</i> , Anaheim, California, USA, February 17-20, 2016	Epstein R, Garcia R, Riley N, Lee SP, Turner C, Ho KY. The effects of patellofemoral taping on patellofemoral joint alignment and contact area. <i>4th International Patellofemoral Pain Research Retreat</i> , Manchester, UK, September 2-4, 2015.
Class of 2016	Comparison of dosing variables of therapist- versus active game based-delivery of large amplitude exercises in children with cerebral palsy	Kasha Hulse Paul Goodrich Daniel Johnson	Hickman			
	Preventing non-contact anterior cruciate ligament injuries in female athletes: what can we learn from the dancers?	Sarah Crow Thomas Crowther Trenton Saupan	Turner; Lee	Turner CL, Lee SP, Vialpando K, Keating B, Pyfer J, Crowther T, Crow S, Saupan T. Preventing Non-Contact ACL Injuries in Female Athletes: What Can We Learn from Dancers? <i>Physical Therapy in Sport</i> . 2018;31: 1-8. doi:10.1016/j.ptsp.2017.12.002	Turner C, Lee SP, Crow S, Keating B, Saupan T, Pyfer J, Vialpando K. The Effects of Instruction on Landing Strategies in College-Aged Dancers and Non-Dancers. <i>Proceedings of the America Physical Therapy Association Combined Sections Meeting</i> , Anaheim, California, USA, 2016 (platform presentation).	
	Effects of simple postural instructions on running form modification in recreational runners- preliminary findings	Elizabeth Billington Scott Devries Kenshin Scoggin	Lee	Lee SP, Gray C, Poggemiller M, Tracy I, Teng HL. Can Simple Postural Instructions Modify Running Forms in Recreational Runners? Projected submission to <i>Journal of Orthopaedic and Sports Physical Therapy (Spring 2018)</i> .		
	Thrust joint manipulation utilization by US physical therapists	Sean Reilly Rebecca Slaughter Erwin Ventura	Puentedura	Puentedura EJ, Slaughter R, Reilly S, Ventura E, Young D. Thrust joint manipulation utilization by U.S. physical therapists. <i>J Man Manip Ther</i> . 2017 May;25(2):74-82. doi: 10.1080/10669817.2016.1187902. Epub 2016 Jun 16.	Puentedura EJ, Slaughter R, Reilly S, Ventura E, Young D. Thrust joint manipulation utilization by U.S. physical therapists. <i>2016 APTA Combined Sections Meeting</i> , Anaheim, California, USA, February 17-20, 2016	
	The effects of locomotion-induced shock loading on tibiofemoral bone stress response	Alexa Standerfer Suzenna Ngo Karen Daun	Ho	Ho KY, Standerfer A, Ngo S, Daun K, Lee SP. Effects of Fast Walking on Tibiofemoral Bone Water Content in Middle-aged Adults. <i>Clinical Biomechanics</i> . 2016; 37: 65-69.	Standerfer A, Ngo S, Daun K, Lee SP, Ho KY. Locomotion-induced shock loading and tibiofemoral joint bone stress injury. <i>2016 APTA Combined Sections Meeting</i> , Anaheim, California, USA, February 17-20, 2016	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Balance confidence and fear of falling avoidance behavior are most predictive of falling in older adults: a prospective analysis	Sarrie Oscar Jessica Sasaoka Kyle Vaughn	Landers	Landers MR, Oscar S, Sasaoka J, Vaughn K. Balance confidence and fear of falling avoidance behavior are most predictive of falling in older adults: prospective analysis. Physical Therapy. 2016;96:433-442.	Landers MR, Sasaoka J, Oscar S, Vaughn K. A prospective analysis of physical and psychological measures in predicting future falls in older adults. APTA Combined Sections Meeting, Anaheim, CA, February 17-20, 2016. Sasaoka J, Oscar S, Vaughn K, Landers MR. Balance confidence and fear of falling avoidance behavior are most predictive of falling in older adults: a prospective analysis. Mountain West IDEa Clinical and Translational Research – Infrastructure Network (CTR-IN) Annual Meeting, Las Vegas, Nevada, June 8-10, 2015.	Landers MR, Durand CS, Powell DS, Kuiken AM, Young DL, Hickman R. Balance confidence and fear of falling avoidance behavior are most predictive of falling in older adults: a prospective analysis. Joint World Congress of ISPG and Gait & Mental Function, Trondheim, Norway, June 24-28, 2012.
	Use of a mobile application to increase patient compliance to a prescribed home exercise program and improve outcomes	Ellie Cobb Jed Hurst Ethan Konshuk	Young		Cobb E, Hurst J, Young D. Use of a mobile application to increase patient compliance to a prescribed home exercise program and improve outcomes. APTA Combined Sections Meeting, Anaheim, CA, February 17-20, 2016.	
	Physical mobility in older adults: influences of body composition, multimorbidity and polypharmacy	Chieh Chen Jeng Linna Sestini Rachel Wilde	Lee		Sestini L, Wilde R, Jeng CC, Lee SP, Schuerman S. Physical Mobility in Older Adults: Influences of Body Composition, Polypharmacy, and Comorbidity. Proceedings of the America Physical Therapy Association Combined Sections Meeting, Anaheim, California, USA, 2016.	
	The effect of dry needling to the multifidus muscle on resting and contracted thickness of transversus abdominis in subjects with low back pain	Shane Collins Abbay Dow Daniel Rincon	Puentedura			
	Heel-raised foot posture and weightlifting shoes do not affect trunk and lower extremity biomechanics during a barbell back squat	Javier Ibarra Derek Oldroyd Ryan Zane	Lee; Gillis	Lee SP, Gillis C, Ibarra J, Oldroyd D, Zane R. Heel-Raised Foot Posture and Weightlifting Shoes Do Not Affect Trunk and Lower Extremity Biomechanics during a Barbell Back Squat. Journal of Strength and Conditioning Research (in press, available online, June 2017).		
Class of 2017	Disposition and success of patients following discharge in the acute setting	Ciera Cortney Katy Lutjens Kris Raines	Young			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
Class of 2017	The effects of fatigue on balance in individuals with Parkinson’s disease: influence of medication and brain-derived neurotrophic factor genotype	Michael Baer Bradley Klemetson Diana Scott	Landers	Baer M, Klemetson B, Scott D, Murtishaw AS, Navalta JW, Kinney JW, Landers MR. The effects of fatigue on balance in individuals with Parkinson disease: influence of medication and brain-derived neurotrophic factor genotype. <i>Journal of Neurologic Physical Therapy</i> . 2018,;42:61-71. DOI: 10.1097/NPT.0000000000000213	Baer M, Klemetson B, Scott D, Navalta J, Murtishaw A, Kinney J, Landers MR. The effects of fatigue on balance in individuals with Parkinson’s disease: influence of medication and brain-derived neurotrophic factor genotype. APTA Combined Sections Meeting, San Antonio, Texas, February 15-18, 2017.	
	Can simple postural instructions modify running forms in recreational runners?	Casey Gray Matthew Poggemiller Ian Tracy	Lee	Lee SP, Gray C, Poggemiller M, Tracy I, Teng HL. Can Simple Postural Instructions Modify Running Forms in Recreational Runners? Projected submission to <i>Journal of Orthopaedic and Sports Physical Therapy</i> 2019 35:89-96.	Gray C, Poggemiller M, Tracy I, Teng HL, Lee SP. Can Simple Postural Instructions Modify Running Forms in Recreational Runners? Proceedings of the America Physical Therapy Association Combined Sections Meeting, San Antonio, Texas, USA, 2017.	
	Use of active video gaming in children with neuromotor dysfunction: a systematic review	Robert Manzanarez Lisa Popescu	Hickman;Lee	Hickman R, Popescu L, Manzanarez R, Morris B, Lee SP, Dufek JS. Use of Active Video Gaming in Children with Neuromotor Dysfunction: a Systematic Review. <i>Developmental Medicine & Child Neurology</i> (in press, available online, May 2017).		
	The reliability of the thoracic percussion test	Casey Donaldson Rey Veloz Kaylee Waters	Puentedura			
	Acute effects of walking on the deformation of femoral articular cartilage	Jayson McClaren Skyler Sudweeks	Ho	Ho KY, McClaren J, Sudweeks S. Knee Valgus Alignment is related to Acute Deformation of Lateral Femoral Cartilage Post-Walking in Older Adults. <i>Journal of Geriatric Physical Therapy</i> . 2019; 42(3): E35-E41.	Ho KY, Sudweeks S, McClaren J. Acute effects of walking on the deformation of femoral articular cartilage. <i>2017 APTA Combined Sections Meeting</i> , San Antonio, TX, USA, February 15-18, 2017	
	Fine-wire intramuscular insertion to the lumbar paraspinal muscles does not affect muscle activation and performance during high exertion spinal extension muscle contractions	James DiMascio Rebeka Hicks Matt Kimber	Lee; Puentedura	Lee SP, DiMascio J, Hicks R, Kimber M, Snyder K, Armour Smith, J, Puentedura E. Insertion and Presence of Fine-Wire Intramuscular Electrodes in the Lumbar Paraspinal Muscles Do Not Affect Muscle Performance and Activation during High-Exertion Spinal Extension Contractions. <i>PM & R</i> 2018 10(11): 1192-1197	DiMascio J, Hicks R, Kimber M, Snyder K, Armour-Smith J, Lee SP. Insertion and Presence of Intramuscular Fine Wire Electrodes in the Lumbar Paraspinal Muscles Do Not Affect Muscle Performance and Activation during High Exertion Spinal Extension Exercises. Proceedings of the America Physical Therapy Association Combined Sections Meeting, San Antonio, Texas, USA, 2017.	
	Pressure injury assessment comparison: bedside nurse vs. experts	Ali’itasi Kelemete Brandi Hillock Casey Snell	Young			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	The impact of visual impairments on mobility performance in community-dwelling older adults	Lauren Andrew Talia Davis Christian Johnson	Lee	Lee SP, Andrew L, Davis T, Johnson C. The Impact of Visual Impairments on Mobility Performance in Community-Dwelling Older Adults: A Cross-Sectional Study. Submitted <i>Physiotherapy Theory and Practice</i> (in review, August 2019)	Andrew L, Johnson C, Tortomasi T, Lee SP. The Impact of Visual Impairments on Mobility Performance in Community Dwelling Older Adults. Proceedings of the America Physical Therapy Association Combined Sections Meeting, San Antonio, Texas, USA, 2017.	
	Predictors of physical therapy non-treatment among patients scheduled for treatment two times a day in the acute hospital	Sara Bookout Kyle Ozaki	Young			
	Gait and balance in Alzheimer’s disease: a retrospective analysis across varying levels of cognitive impairment	Diana Contreras Jessica Heim Jun Nelson	Landers		Landers MR, Contreras D, Heim J, Nelson KJ, Nash JM, Longhurst JK. Gait and balance in Alzheimer’s disease: a retrospective data analysis of function across varying levels of cognitive impairment. APTA Combined Sections Meeting, San Antonio, Texas, February 15-18, 2017.	
	Measurement of anterior translation of the mandibular condyle using ultrasonography	Danielle Hahn Christensen Hardy Brooke Laskowski	Ho; Puentedura	Ho KY, Laskowski B, Garcia D, Hardy C, Puentedura E. Measurement of anterior translation of the mandibular condyle using sonography. <i>The Journal of Physical Therapy Science</i> . 2019; 31 (1), 116-121.	Ho KY, Basar B, Hahn D, Javier C. Reliability of Measuring Anterior Translation of the Mandibular Condyle during Mouth Opening Using Ultrasonography. <i>2017 APTA Combined Sections Meeting</i> , San Antonio, TX, USA, February 15-18, 2017	
Class of 2018	The effect of dry needling to the multifidus muscle on resting and contracted thickness of transversus abdominis in subjects with low back pain	Nick Dawson Brianna Smith Tony Trinh Michael Tuttle	Puentedura			
Class of 2018	Predictors of physical therapy non-treatment in the acute hospital setting	Joseph Fertitta Jesse Kim Patrick Williams	Young		Fertitta J, Kim J, Williams P, Young D. Successful Patient Participation Among Acute Hospital Physical Therapists. <i>Accepted 2018 APTA Combined Sections Meeting</i> , New Orleans, LA, USA, February 21-24, 2018	
	Influence of intramuscular electromyographic electrode insertion on lower back muscle performance and activation	Vincent Dinglasan Anthony Duong Russell Totten	Lee; Puentedura	Lee SP, Dinglasan V, Duong A, Totten R, Armour Smith, J. Individuals with Recurrent Low Back Pain Exhibit Significant Changes of Paraspinal Muscle Performance after Lumbar Multifidus Intramuscular Fine Wire Electrode Insertion. <i>PM&R</i> (Spring 2019).	Lee SP, Dinglasan V, Duong A, Totten R, Armour-Smith J. Individuals with Recurrent Low Back Pain Exhibit Reduced Paraspinal Muscle Strength after Intramuscular Fine-wire EMG Electrode Insertion to Lumbar Multifidus. (Accepted for platform presentation) Proceedings of the America Physical Therapy Association Combined Sections Meeting, New Orleans, USA, 2018.	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	The moderation effect of BDNF genotype and self-reported habitual physical activity levels on age of onset, disease progression, and postural instability in Parkinson's disease	Kyle Johnson Danielle Salgo Jessica Zorn	Landers	Landers MR, Johnson KN, Johnson S, Lyle J, Ormsby T, Salgo DC, Zorn JB, Murtishaw AS, Salazar AM, Kinney JW. Pre-diagnosis physical activity habits are associated with age of diagnosis in Parkinson's disease. <i>Clinical Parkinsonism & Related Disorders</i> . 2019;1:25-30.	Johnson K, Salgo D, Zorn J, Landers MR. The reliability of a self-report questionnaire about lifetime physical activity levels in people with Parkinson's disease. APTA Combined Sections Meeting, New Orleans, Louisiana, February 21-24, 2018.	Landers MR, Johnson KN, Johnson S, Lyle J, Ormsby T, Salgo DC, Zorn JB, Kinney JW. Pre-diagnosis physical activity habits are associated with age of diagnosis and postural instability in Parkinson's disease. International Congress of Parkinson's Disease and Movement Disorders, Nice, France, September 22-26, 2019
	Neuromuscular adaptations during slope walking in individuals post-stroke	Eric Akoopie Brooke Conway Trisha Koch	Liang	Liang JN, Lee YJ, Akoopie E, Kleven BC, Koch T, Ho KY. Impaired H-reflex adaptations following slope walking in individuals with post-stroke hemiparesis. <i>Frontiers in Physiology</i> . <i>Accepted</i> .	<ol style="list-style-type: none"> 1. Liang JN, Koch T, Akoopie E, Conway B. Neuromuscular adaptations following acute bout of slope walking in individuals post-stroke. 2017 Society for Neuroscience (SfN), Washington DC. 2. Liang JN, Koch T, Akoopie E, Conway B, Changes in Soleus H-reflexes following slope walking in people post-stroke. 2017 American Society of Neurorehabilitation (ASNR), Baltimore, MA. 3. Submitted to APTA Combined Sections Meeting, New Orleans, LA, USA, February 21-24, 2018 	
	Immediate effects of cervical spine manipulation on gait parameters in individuals with and without mechanical neck pain	Marc Albano Emily Blok Beau Gronert Ryan Masuda	Puentedura			
	A retrospective study comparing two different dressings in the treatment of skin tears	Alex Preciado Angela Sandoval Brandon Bales	Young			
	The influence of early access to physical therapy on fear of falling and mobility functions in individuals with lower limb loss	Tyler Chin Heather Fox Juan Gutierrez	Lee	Lee SP, Chien LC, Chin T, Fox H, Gutierrez J. Financial Difficulty after Amputation is Associated with Perceived Health and Wellbeing in Community-Dwelling Persons with Lower Limb Loss. <i>Physical Therapy</i> (submitted August 15th, 2019)	Lee SP, Chin TM, Fox HJ, Gutierrez J. Access to Physical Therapy and Socioeconomic Status on Fear of Falling and Mobility Outcomes in Individuals with Lower Limb Loss. Proceedings of the America Physical Therapy Association Combined Sections Meeting, New Orleans, USA, 2018.	
	Reliability and validity of using a mobile application to assess knee motion in healthy and post-anterior cruciate ligament reconstruction subjects	Brenda Benson Tyrel Nelson	Ho; Turner	Ho KY, Deaver BB, Nelson T, Turner C. Using a mobile application to assess knee valgus in healthy and post-anterior cruciate ligament reconstruction participants. <i>Journal of Sport Rehabilitation</i> . 2019; 28(5): 532-535.	Ho KY, Turner C, Benson B, Nelson T. Reliability and validity of using a mobile application to assess knee motion in healthy and post-anterior cruciate ligament reconstruction subjects. 2018 APTA Combined Sections Meeting, New Orleans, LA, USA, February 21-24, 2018	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Investigation of the cardiovascular endurance of dance majors	Arnold Huang Ali Ross Kelsey Taelour Geneva Winters	Turner			Turner C, Huang A, Ross A, Taelour K, Winters G. Investigation of the cardiovascular endurance of dance majors. Presented at the Performing Arts Medicine Association International Symposium, Snowmass, CO. June 29, 2017
	Downhill running increases patellofemoral joint stress	Theresa French Brooks Klein Young Lee	Ho	Ho KY, French T, Klein B, Lee Y. Patellofemoral joint stress during incline and decline running. <i>Physical Therapy in Sport</i> . 2018; 34: 136-140.	Downhill running increases patellofemoral joint stress. <i>2018 APTA Combined Sections Meeting</i> , New Orleans, LA, USA, February 21-24, 2018	
Class of 2019	Effect of Physical Therapy on Patient Self-Reported Outcomes and Perceptions of Mobility after Lower Extremity Amputations	Greg Amaya Jake Gante Zach Meinzer Abbas Sadrossadat	Lee			International Society of Prosthetics and Orthotics World Congress, Kobe, Japan, 2019
	Differences in Lumbar Spinal Muscle Morphology and Performance In Amputees With and Without Low Back Pain	Melissa Damele Rachel Gross Ronualdo Robina	Ciccotelli & Lee		Differences in Lumbar Spinal Muscle Morphology and Performance In Amputees With and Without Low Back Pain. 2019 APTA CSM, Washington, DC	
	Rural or Underserved Practice Interest Among Doctor of Physical Therapy Students: Do Clinical Experiences Change Opinions?	Brandon Godin Mac Neil Moresca Trenton Poulson Tyler Satoshige	Gillis Kins Young		Godin B, Moresca, MN, Poulson T, Satoshige T, Young D, Kins K, Gillis G. Rural or Underserved Practice Interest Amongst Doctor of Physical Therapy Students: Do Clinical Affiliations Change Opinions? [poster presentation] Proceedings of the 2019 APTA Combined Sections Meeting, Washington, D.C., January 2019.	
	The Moderation Effect of BDNF Genotype and Self-Reported Lifetime Physical Activity Habits on Postural Instability in Parkinson's Disease	Samantha Johnson Tyler Ormsby	Landers	Landers MR, Johnson KN, Johnson S, Lyle J, Ormsby T, Salgo DC, Zorn JB, Murtishaw AS, Salazar AM, Kinney JW. Pre-diagnosis physical activity habits are associated with age of diagnosis in Parkinson's disease. <i>Clinical Parkinsonism & Related Disorders</i> . 2019;1:25-30.		Landers MR, Johnson KN, Johnson S, Lyle J, Ormsby T, Salgo DC, Zorn JB, Kinney JW. Pre-diagnosis physical activity habits are associated with age of diagnosis and postural instability in Parkinson's disease. <i>International Congress of Parkinson's Disease and Movement Disorders</i> , Nice, France, September 22-26, 2019
	Patellar Tendon Morphology in Trans-Tibial Amputees Utilizing Prosthesis with a Patellar-Tendon-Bearing Feature	Michelle Evers Jessica Kellogg Kelly Teter	Ho Lee	Ho KY, Evers M, Kellogg J, Teter K, Lee SP, Chang YJ, Bashford G. Patellar Tendon Morphology in Transtibial Amputees Utilizing a Prosthesis with a Patellar-tendon-bearing Feature. <i>Nature Scientific Reports</i> (Spring 2019).	Ho KY, Lee SP, Evers M, Kellogg J, Teter K, Chang E, Bashford G. Patellar Tendon Morphology in Trans-Tibial Amputees Utilizing a Prosthesis with a Patellar-Tendon-Bearing Feature. Proceedings of the America Physical Therapy Association Combined Sections Meeting, Washington D.C., USA, 2019.	
	Modulation of Corticospinal Excitability Using Cathodal Transcranial Direct Current Stimulation to Improve Walking in Individuals with Chronic Post Stroke Hemiparesis	James Schomig Sage Lyons Kylie Henry Neil Drobitch	Liang			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Neurodynamics under Different Walking Speeds in Individuals with Chronic Post-Stroke Hemiparesis	Corey Ackley Kiley Aki Joshua Arias Jassie Trinh	Liang Ho			
	Intra-and Inter-Rater Reliability of a Ballet-Based Dance Technique Screening Instrument	Ivetta Lassey Jessie Lesar Zachary Shaver	Turner	Bronner S, Lassey, I, Lesar J, Shaver S, Turner C. Intra-and Inter-Rater Reliability of a Ballet-Based Dance Technique Screening Instrument. Accepted for publication Medical Problems of Performing Arts, August 2019	Bronner S, Lassey, I, Lesar J, Shaver S, Turner C. Intra-and Inter-Rater Reliability of a Ballet-Based Dance Technique Screening Instrument 2019 APTA Combined Sections Meeting, Washington, DC, USA, January 23-26, 2019	
	Impact of Clinician Experience and Positive Language on Subject Expectation of Cervical Spine Manipulation Effects	Stephen Elmer Jonah Mawae Josh Wood	Barrett; Puentedura			
	Physical Therapy is Associated with Improvements in Gait and Balance in Individuals with Cognitive Impairment: A Retrospective Analysis	Elbert Chen Steven Jackson Jason Pham	Landers Longhurst	Longhurst JK, Phan J, Chen E, Jackson S, Landers MR. Physical therapy for gait, balance, and cognition in individuals with cognitive impairment: a retrospective analysis. Rehabilitation Research and Practice. 2020:8861004.		Longhurst J, Phan J, Chen E, Jackson S, Landers MR. Physiotherapy improves gait and balance in patients with cognitive impairment: a retrospective analysis. World Confederation for Physical Therapy Congress, Geneva, Switzerland, May 10-13, 2019.
Class of 2020	Back Clinic at Volunteers in Medicine of Southern Nevada	Daniel Tiano James Tingey Rebecca Templeton Meagan Kelly	Barrett Kins		Kelly M, Templeton R, Tingey J, Tiano D, Barrett T, Kins K. Patient, Student, and Faculty Perceptions of a Student Led Pro-Bono Education and Treatment Based Back School for Uninsured Nevadans. [poster presentation] APTA Combined Sections Meeting, Denver, CO. February 13-15, 2020.	
	Back Clinic at Volunteers in Medicine of Southern Nevada	Javier Ascanio Pellon Trevor Pacuk Lauren Liebert Sofia Cruz	Barrett Kins		Ascanio-Pellon J, Cruz S, Liebert L, Pacuk T, Barrett T , Kins K. Patient and Facility Perceptions and Feasibility from a Student led Pro-Bono Education and Treatment Based Back School for Uninsured Nevadans. [poster presentation: award winning] APTA Combined Sections Meeting, Denver, CO. February 13-15, 2020.	
	Amputee low back pain	Samantha Leonard Elizabeth Trujillo Stephen Hill	Ciccotelli			
	Partnering with the NVPTA to Improve PT/PTA Engagement	Rachel Cooklin Josh Cooper Madison Luna	Gillis			
	Comparisons of Patellar Bone Mineral Density between Individuals with and without Patellofemoral Pain	Steven Shepherd Allina Cummins Chris Khuu Shane Parker	Ho			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Somatosensory input and gait in individuals post-stroke	Rachel Wood Amanda Reilly Victor Hung Nikita Yuskov	Liang Ho			
	Modulation of cortical excitability to improve gait and balance post-stroke	Jordan Jacklin Peyton Hobson Leonard Ubalde Sara Wright-Avila	Liang			
	Brain volumetrics, Alzheimer's Disease	Morgan Wise Daniel Krist Caitlin Moreland Jon Basterrechea	Landers Longhurst	Longhurst JK, Wise MA, Krist DJ, Moreland CA, Basterrechea JA, Landers MR. Brain volumes and dual-task performance correlates among individuals with cognitive impairment: a retrospective analysis. <i>Journal of Neural Transmission</i> . 2020; 127:1057-1071.	Longhurst J, Wise M, Krist D, Moreland C, Basterrechea J, Landers MR. Associations of Brain Volumetry and Dual Task Interference Among Older Adults with Cognitive Impairment. APTA Combined Sections Meeting, Denver, CO, February 12-15, 2020.	
	Perceived Helpfulness of Physical Therapy after Amputation	Michaela Kubo Jennifer Gorton Lindsey Horn Amanda Ferraro	Lee			
	Implementation of Community based Fall Prevention Program utilizing evidence based tools	Jeremy Nordfelt Kendra Morrison Cheng Yang Tu Alexis Mansoor	Nash		Implementation of Community based Fall Prevention Program utilizing evidence based tools. <i>Tri-State PT Conference</i> , Las Vegas, NV, USA, October 11-13, 2019. <i>Educational Leadership Conference</i> , Bellevue, WA, USA, October 18-20, 2019	
	Dancer screening clinic	Kristin Allman Ryan Yim Quinn Williams Matt McArthur	Turner			
	Systematic review of physical therapy (mode and dosing) for various hospital inpatient patient populations.	Brendan Acosta Bradley Goins	Young			
	Retrospective data analysis of the relationship between AM-PAC Activity Short Form scores and value based outcomes such as discharge disposition and length of stay.	Stephanie Rosen Amber Steele	Young			
Class of 2021	Strategies to facilitate area clinician participation in PT student service learning	Alyssa Woo-Hatch Felicia Doblado Gilberto Carrillo Gavin Brady	Barrett		Doblado F, Brady G, Barrett T, Woo A, Carrillo-Hernandez G, Kins K. Recruitment Strategies to Facilitate Clinician Participation in PT Student Service Learning. [poster presentation] APTA Combined Sections Meeting, February 2021.	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Quality Improvement Analysis of a Student led Pro-Bono Education and Treatment Based Back School for Uninsured Nevadans	Michael Bashaw Tyler Parvin Ryan Pauly Vu Pham	Kins		Bashaw E, Pauly R, Pham V, Parvin T, Barrett T, Kins K. Quality Assurance of a Pro-Bono Student-Led Back School, a Service-Learning Project. [poster presentation] Proceedings of the 2021 APTA Combined Sections Meeting, Virtual, February 2021.	
	Do Runners with Patellofemoral Pain Exhibit Greater Trunk Extension during Running	Tavin Fox Zach Clark Christine DuVall Caitlin Howden	Ho Barrett	Ho KY, Barrett T, Clark Z, Fox T, DuVall C, Howden C, Murata A. Comparisons of trunk and knee mechanics during various speeds of treadmill running between runners with and without patellofemoral pain: a preliminary study. Journal of Physical Therapy Science. October 2021. 33: 737–741.	Ho KY, Barrett T. Comparisons of trunk and knee mechanics during various speeds of treadmill running between runners with and without patellofemoral pain: a preliminary study. [platform presentation] APTA Combined Sections Meeting, February 2022.	
	Effects of different somatosensory input on gait kinetics & kinematics in people post-stroke	Jed Lee Megan Keohane Jynelle Arches Aaron Simon	Liang Ho			
	Neuromodulation to improve walking in people post-stroke	Rafael Cabrera John Gan Lana Laudermilch Ben Wolkenhauer	Liang			
	A vicious cycle of fear of falling avoidance behavior in Parkinson's disease	Kameron Jacobson Nicole Matsunami Hannah Habighorst Michelle Regis	Landers	Landers MR, Jacobson KM, Matsunami NE, McCarl HE, Regis MT, Longhurst JK. A vicious cycle of fear of falling avoidance behavior in Parkinson's disease: a path analysis. Clinical Parkinsonism & Related Disorders. 2021;4:100089. DOI:10.1016/j.prdoa.2021.100089	Landers MR, Jacobson K, Matsunami N, McCarl H, Regis M, Longhurst J. A vicious cycle of fear of falling avoidance behavior in Parkinson's disease: a path analysis. APTA 2021 Combined Sections Meeting Virtual, February 24-27, 2021.	
	Customized prosthetic socket: does it help with autonomy support and outcomes in people with limb loss?	Cailin Mitchell Kenneth Repayo Matthew Tillitt Collin Weber	Lee			
	Trips, Slips and Falls: Balance Response Strategies in People with and with Lower Limb Loss	Denise Ng Sam Hadley James Anderson Catrina Fabian	Shih			
	Implementation of the Stepping On Program for older adults in Southern Nevada	Jordan Bowers JP Gaddi Lea Kuwaye	Nash			

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Dancer screening clinic	John Lencioni Laura Nguyen Kristen Manaloto	Turner			
	Intra- and Inter-rater reliability of a Ballet-based dance Technique Screening Instrument	Katie Stone Braden Waters	Turner			
	Responsiveness of the AM-PAC Basic Mobility Low Function Short form	Meagan Wonderling David Miller Selena Soria	Young			
Class of 2022	Essential tools for sustainability of a student-led, pro-bono back school	Cory Brown, Rosalie Gutierrez, Jennifer Montes, Rondale Scruggs	Barrett/ Kins			
	Diagnostic ultrasound as a reliable tool to measure multifidus thickness	Jessie Peterson, Katie Shigemoto, Nate Gentry, Valeria Garcia	Ciccotelli			
	Effects of a remote exercise intervention on aerobic endurance in individuals with Down syndrome	Johnny Crimm, Ben Lee, Andy Murata, Lena Wolf	Hilgenkamp			
	The effects of a telehealth exercise intervention on balance in adults with Down Syndrome	Mark Barton, Kristina Guerrero, Andrew Martinez, Allie Umagat	Hilgenkamp / Ho			
	Effects of a 12-week telehealth exercise intervention on gait speed and gait deviations in adults with Down syndrome	Robert Lum, Christopher Roys, Taylor Souza, Daniel Stopka	Ho/ Hilgenkamp			
	Brain and spinal cord adaptations associated with patellofemoral pain: a systematic review and meta-analysis	Savanna Budge, Austin Madriaga, Kara Meske, Derrick Nguyenton	Ho/ Liang			
	Physical therapy alumni rural employment assessment	Nikkita Crozier, Karen Santos	Kins		Kins K, Crozier N, Santos K. Alumni Rural Employment Assessment for a Doctor of Physical Therapy Program. [poster presentation] Proceedings of the 2022 APTA Combined Sections Meeting, San Antonio, TX, February 2022	

APPENDIX A. Student capstone productivity dissemination table.

Year	Project title	Students	Advisor	Peer-reviewed publication	Peer-reviewed presentation – national	Peer-reviewed presentation - international
	Factors predicting fear of falling avoidance behavior in Parkinsonisms	Kameron Eckard, Ryan Hammar, Franjo Vukojevic	Landers Longhurst	Longhurst JK, Rider JV, Eckard K, Hammar R, Vukojevic F, Campbell J, Landers MR. Factors predicting fear of falling avoidance behavior in parkinsonisms. NeuroRehabilitation. 2022;50:65-73.		Landers MR, Rider JV, Eckard K, Hammar R, Vukojevic F, Campbell J, Longhurst JK. Disease severity and gait velocity are predictive of fear of falling avoidance behavior in people with parkinsonisms. XXVII World Congress on Parkinson's Disease and Related Disorders. Prague, Czech Republic, May 1-4, 2022.
	Direction of attentional focus embedded in prosthetic training: current practice and potential for improving motor skill learning in individuals with lower limb loss	Alex Bonczyk, Katrina Dimapilis, Sarah Partridge, Samantha Ruiz	Lee			
	Increasing utilization of Otago fall prevention program by Nevada physical therapists: a service learning project	Jared Apostol, Erica Mooy Brown, Danielle Uptain	Nash			
	Walking with poles improves step length of simulated prosthetic gait	Marissa Elquist, Jonathan Garcia, Braden Owens, Daniel Perez	Shih/Lee			
	Efficacy and benefits of providing a screening clinic for performing arts students	Sean Bean, Joanna Centeno, Elizabeth Williams	Turner			
	Perceived value of acute care physical therapy	Juliana Amenta, Drew Falcineli, Erin Heenan, Hannah Kendall	Young			

Appendix B. Program outcomes table.

Year	First attempt ratio	% pass rate - first time	% pass rate – Overall	UNLVPT average score	National average score	Rank of % pass rate of all programs	Graduation rate	Employment rate	Matriculation rate (# matriculated/# offered)	Acceptance rate (# matriculated/# total applications)
2000	19/19	100	100			1 of ???	89.5	100		
2001	16/17	94.1	100			?	100	100		
2002	11/15	73.3	100			?	100	100		
2003	11/15	73.3	100			?	88.2	100		
2004	21/21	100	100			1 of ???	95.5	100		
2005	18/18	100	100			1 of ???	90	100		
2006	2/2	100	100			1 of ???	100	100		
2007	17/17	100	100			1 of ???	89.5	100		
2008	15/18	83.3	100	654.7	644.8	111 of ???	95.0	100		
2009	20/20	100	100	660.4	645.6	1 of 192	91.3	100	51.7%	7.14%
2010	22/23	95.7	100	670.3	647.8	40 of 193	100	100	42.3%	7.11%
2011	29/29	100	100	685.7	651.5	1 of 197	96.7	96.4	60.0%	6.34%
2012	27/28	96.4	100	669.5	653.8	41 of 208	93.3	100	52.5%	4.96%
2013	24/27	88.9	100	677.5	667.3	134 of 209	93.1	100	65.4%	4.74%
2014	28/28	100	100	706.8	676.5	1 of 209	93.3	100	75.6%	4.21%
2015	27/29	93.1	100	684.0	680.6	112 of 214	90.6	100	53.7%	6.26%
2016	33/33	100	100	714.7	682.8	1 of 226	97.1	100	52.9%	5.86%
2017	33/33	100	100	704.8	682.2	1 of 236	97.1	100	63.2%	7.52%
2018	35/35	100	100	700.1	673.9	1 of 236	97.2	100	64.9%	7.48%
2019	32/33	97.0	100	693.3	675.7	? of 240+	91.7	100	61.5%	10.3%
2020	45/45	100.0	100	709.2	678.5	1 of 240+	97.8	100	69.6%	12.5%
2021	42/43	97.7	100	691.9	672.2	34 of 257	93.5	100	63.0%	11.1%
2022	46/47	97.9	100	685.4	667.5	TBD	97.9	100	59.3	15.3%
Overall	532/554	96.0%	100%	687.2	666.7	29.6 (since 2004)	94.7%	99.8%	59.7%	7.9%

Appendix C. UNLVPT 2022 Assessment Report

Annual Academic Assessment Report Cover Sheet

Program Information

Program Assessed: Doctor of Physical Therapy

Department: Physical Therapy

College: Integrated Health Sciences

Department Chair: Merrill Landers

Date Submitted: 12/8/2022

Contact Person for This Plan

Name: Keoni Kins

Phone: 702-895-4883

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INTRODUCTORY STATEMENTS AND INFORMATION

Department Mission Statement

The mission of UNLVPT is to enhance the health and quality of life of Nevada residents and beyond. We strive to reach this mission by developing competent and compassionate practitioners who are prepared to engage in critical thinking, life-long learning, evidence-based practice, and to provide interprofessional care.

Department Vision Statement

The vision of UNLVPT is to be recognized nationally among the top tier of physical therapy programs for impactful research, educational excellence, and service that promote the improvement of health of individuals, populations, and society.

Our core values:

- Learner-centered education with faculty accessibility
- Professionalism (accountability, altruism, compassion/caring, excellence, integrity, professional duty, social responsibility)
- Respect for the dignity and diversity of all individuals
- Engaging in and disseminating research that advances the science and practice of physical therapy and rehabilitation science;
- Promoting the movement system to improve the health of society;
- Endorsing the philosophy of the Quadruple Aim;
- Developing competent and compassionate practitioners who are prepared to engage in critical thinking, life-long learning, evidence-based practice, and to provide interprofessional care; and,
- Modeling professional and community service, including to rural and underserved areas.

The UNLVPT Academic Assessment Report focuses on 3 main areas:

- 1) **Learning Outcomes**
 - a. Academic Preparation
 - b. Cultural Climate Survey
- 2) **Post-graduation Success**
 - a. Alumni Survey

- b. Employer Survey
- 3) **National Comparison**
 - a. Academics
 - b. Diversity

Student Learning Outcomes (Program Level)

Upon completion of the DPT degree, students should be prepared to:

1. Commit to and demonstrate the professional behaviors as outlined by the American Physical Therapy Association (APTA)
2. Engage in the ethical practice of physical therapy reflecting the core values as outlined by the APTA and other key documents including Guide to Physical Therapist Practice, Standards of Practice, Code of Ethics, and Guide for Professional Conduct
3. Achieve entry-level competence in all areas of clinical practice as measured by the Clinical Performance Instrument
4. Competently address all areas of physical therapy patient/client management including
 - a. Examination
 - b. Evaluation
 - c. Diagnosis
 - d. Prognosis
 - e. Intervention
 - f. Outcome measurement
5. Facilitate patient progress toward improved outcomes across all levels of the International Classification of Functioning, Disability, and Health including
 - a. Health conditions
 - b. Body structure and function
 - c. Activities
 - d. Participation
6. Assume professional roles including those in the areas of education, critical inquiry/research, administration, and consultation
7. Engage in evidence-based practice based on sound, critical reasoning processes
8. Become autonomous primary health care providers within the scope of physical therapy practice to include screening/systems review, differential diagnosis, referral, and teaming as appropriate
9. Engage in physical therapy roles in prevention, and the promotion of health, wellness, and fitness
10. Provide care to rural and underserved populations

Assessment of Outcomes:

- All 10 of the above outcomes are assessed throughout the curriculum either through didactic education or through clinical education experiences. The table below outlines where each outcome is covered in the current curriculum. Students are then surveyed at the end of the program. These results are found below.

Outcomes Covered in the Curriculum

Numbered outcomes in the columns; courses in which that outcome is covered in the rows.

	1. Professional Behaviors	2. Ethical practice	3. Clinical competence	4. Client mgmt.	5. Patient outcomes	6. Professional roles	7. EBP	8. Primary Care	9. Prevention and wellness	10. Rural and Underserved
DPT 720	M	M		M		M	M	M		
DPT 726	B	B			B	B	B			
DPT 727	M	M	B		B	B	M	B		

DPT 730/730L	B	B	B	B		B	B	B		
DPT 732/732L	M		B	B	B	B	B		B	
DPT 735/735L	M			M		M				
DPT 740				B	M	M	B			
DPT 741	B			B	B		B	B		
DPT 742	B			B	B	B	B	B	B	
DPT 744/744L	B	B		B		B				
DPT 745/745L	M	M		B		M				
DPT 746/746L	B	B		B					B	
DPT 747	M			M		M			M	
DPT 748	M			M		M		M		
DPT 749/749L	B		B	B	B	B	M		B	
DPT 750/750L	E		B	M	M	M	M	M	M	B
DPT 751	M			M		M			E	
DPT 752/752L	M		B	M	M	M	M	B		
DPT 754/754L	M		B/M	B	B	B	M	M	B	
DPT 756	M			M		M	M		M	
DPT 757	M			M	M	M				
DPT 758	M			M				M		
DPT 759/759L	M			M	M	M	M	M		B
DPT 761	M	M	B	M	M	M	M			E*
DPT 762	M	M	M	M	M	M	M			E*
DPT 763	M	M	M	M	M	M	M			E*
DPT 764	M	E	E	E	E	M	M			E*
DPT 770/770L	M	M	M	M	M	M	M	M	M	
DPT 772	M			M		M	M			B
DPT 774	M	M	M	M	M	M			M	M
DPT 780	M			M		M	M		M	
DPT 785/785L	M		M	M	M	M	M	M	M	
DPT 786/786L	M	M		M	M	M	M	M	M	
DPT 788/788L	M	M	M	M	M	M	M	M	B	
DPT 790	M	M		M	B	M	M			
DPT 791	M	M			M	M	E			
DPT 793	M			M		M	M			
DPT 798	E					E	E			

B = Beginning, M = Middle, E = End

B = outcome introduced in beginning of development, such as in introductory course

M = outcome covered in middle stages of development

E = outcome fully developed at the end of career, such as in a capstone course

*Students must complete at least one rural or underserved clinical affiliation, and it may occur in any of these 4 courses. This is the culminating experience related to Learning Outcome #10 (rural/underserved populations).

Assessments: Methods, Instruments, and Analysis:

Assessment Instrument	Instrument, sampling strategy, and how results are collected	Learning outcome(s) assessed	Expected Measures
National Physical Therapy Examination (NPTE):	The NPTE is a standardized examination required for all physical therapists who are licensable in any state in the U.S. Some students take the exam just prior to graduation, while others take it following graduation. UNLVPT must purchase NPTE results reports from the Federation of State Boards of Physical Therapy.	1 through 10 (all)	1. Program average over 3 years must meet or exceed 85% pass rate. 2. UNLV average scores will meet or exceed national average.
Pre-graduate Surveys	An online survey named the Physical Therapy Graduate Questionnaire (PT-GQ). All graduating students are sent the link and encouraged to participate in the survey the week of graduation.	1 through 10 (all)	At least 80% of pre-graduates will report feeling adequately prepared for all elements of practice just prior to graduation. This includes a cultural climate survey.
Alumni Surveys	An online survey developed by UNLVPT and administered to alumni one year after their graduation.	1 through 10 (all)	At least 80% of alumni will report feeling adequately prepared for all elements of practice one year following graduation.
Employer Surveys	An online survey developed by UNLVPT and administered to student employers every other year. Assessment Coordinator will create, maintain, & update surveys with input from, Assessment Committee, Core Faculty, and Chair.	1 through 10 (all)	At least 80% of employers will report feeling that our graduates are adequately prepared for all elements of practice upon graduation.
eCurriculum Reports	eCurriculum is software that allows faculty to align course objectives with accreditation (CAPTE) requirements, recommendations from the APTA, and the Department.	1 through 10 (all)	100% of CAPTE requirements will be addressed in the curriculum. 100% of entry level APTA recommendations will be addressed in the curriculum. 100% of UNLVPT learning outcomes will be addressed in the curriculum.
Aggregated data from CAPTE and the Physical Therapy Centralized Application Service (PTCAS)	These data are available online and provide a basis for comparing performance of UNLVPT against other entry-level physical therapy programs. All accredited entry-level physical therapy programs must report to CAPTE annually. PTCAS data allows for comparison among other PT programs that use the service. Selected trends relevant to UNLVPT mission, vision, and core values are reported here.	1 through 10 (all)	UNLVPT will meet or exceed standards set by CAPTE to retain accreditation.

Aggregated Scholarly Activity Data from Faculty Annual Work Reports (FAWR)	Information regarding student involvement in scholarly work with faculty. These data are retrieved from the FAWR forms. Data regarding UNLVPT scholarly work as it relates to the Mission, Vision, and Core Values of the Department are also included here.	Objective 6, Mission, Vision, Core Values	All students must complete a mentored group research project.
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Graduate Learning Outcomes:

- UNLV Graduate students will engage in:

Outcome	Outcome in the Curriculum	How Outcome is Assessed
1. Research, scholarship, creative expression and/or appropriate high-level professional practice	Cumulative Capstone: Original Research Project	Learning Outcome Survey (Outcome #7)
2. Activities requiring originality, critical analysis, and expertise	Cumulative Capstone: Original Research Project and Clinical Education	Learning Outcome Survey (Outcome #6, 7, 8, 9)
3. The development of extensive knowledge in the field under study	Didactics and Clinical Education	Graduation Exit Survey + Learning Outcome Survey (Outcome #3, 4, 5)

RESULTS, CONCLUSIONS, AND DISCOVERIES

NPTE Examination

All 47 (100%) DPT graduates in the class of 2022 passed the NPTE examination with a first attempt pass rate of 46/47 (98%). The average score for the UNLVPT class of 2022 exceeded the national average for all accredited programs by over 20 points. UNLVPT has exceeded the benchmark for this assessment instrument and retained a pass rate of 100% overall for students taking the exam. First time test takers from UNLVPT scored above the national average in all content areas: Physical Therapy Examination; Foundations for Evaluation Differential Diagnosis, and Prognosis; Interventions; and Non-System Domains. UNLVPT graduates scored above the national average on questions related to Cardiovascular/Pulmonary and Lymphatic Systems, Musculoskeletal System, Neuromuscular/Nervous System, and Other Systems.

Year	Pass rate first attempt (FA)	UNLVPT average score	National average score	National FA pass rate rank	Overall pass rate
2000	100%				100%
2001	94.1%				100%
2002	73.3%				100%
2003	73.3%				100%
2004	100%				100%
2005	100%				100%
2006	100%				100%
2007	100%				100%
2008	83.3%				100%
2009	100%	660.4	645.6	1 of 192	100%
2010	95.7%	670.3	647.8	40 of 193	100%
2011	100%	685.4	651.9	1 of 197	100%
2012	96.4%	669.5	653.8	41 of 208	100%
2013	88.9%	677.5	667.3	134 of 209	100%
2014	100%	706.8	676.5	1 of 209	100%
2015	93.1%	684.0	680.6	112 of 124	100%
2016	100%	714.7	682.8	1 of 226	100%
2017	100%	704.8	682.2	1 of 236	100%
2018	100%	700.1	684.8	1 of 236	100%
2019	97%	693.3	672.7	n/a	100%

2020	100%	709.2	679.2	1 of 240+	100%
2021	97%	689.3	671.5	n/a	100%
2022	98%	685.4	667.5	n/a	100%
Overall	96%	687.2	666.7	TBD	100%

Pre-graduation Survey

Results of the 2022 UNLVPT Pre-graduation Survey are consistent with the strong performance on the NPTE examination. A high number of respondents of the Class of 2022 agreed or strongly agreed that they were well prepared for all 10 learning outcomes. Over 95% of respondents felt well-prepared for learning outcomes 1, 2, 3, 4, 6, 7, 8, 9, and 10 (see page 2 for outcomes).

Percentage of students who felt well-prepared by learning outcome:

Learning outcome	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Agree+Strongly agree
1	0.00%	4.26%	0.00%	25.53%	70.21%	97.88%
2	0.00%	0.00%	2.13%	29.79%	68.09%	97.87%
3	0.00%	0.00%	2.13%	42.55%	55.32%	95.74%
4	0.00%	2.13%	2.13%	36.17%	59.57%	97.87%
5	0.00%	2.13%	0.00%	31.91%	65.96%	87.24%
6	0.00%	6.38%	6.38%	48.94%	38.30%	95.75%
7	0.00%	0.00%	4.26%	38.30%	57.45%	95.74%
8	0.00%	0.00%	4.26%	36.17%	59.57%	95.75%
9	0.00%	0.00%	4.26%	40.43%	55.32%	95.75%
10	0.00%	4.26%	0.00%	46.81%	48.94%	97.88%

With regard to preparation of content areas, there is an alignment between NPTE scores and student ratings of satisfaction with their preparation. Many content areas ranked above the 80% benchmark for success with 98% of students feeling good or excellent preparation in anatomy, neuroscience, clinical reasoning, and medical/surgical conditions. Specific content areas with which the students felt less than 80% satisfaction with their preparation include genetics, exercise science, pathology, pharmacology, management/finance, and metabolomics. It should be noted that genetics, genomics, epigenetics, and metabolomics still need to be fully integrated into the curriculum, so it is expected that students would not feel as prepared in these areas.

Student perception of their preparation by content area:

Content Area	Poor	Fair	Good	Excellent	Good+Excellent
Anatomy	0	1	17	29	98%
Physiology	1	2	22	22	93%
Genetics, Genomics & Epigenomics*	3	23	17	4	44%
Neuromusculoskeletal plasticity and cell/tissue crosstalk	0	7	17	23	85%
Exercise Science, Nutrition	1	12	24	10	72%
Biomechanics, Kinesiology	0	3	16	28	93%
Neuroscience	0	1	19	27	98%
Pathology, Histology	3	12	23	9	68%
Pharmacology	3	12	26	6	68%
Diagnostic imaging	1	7	24	15	83%
Psychosocial aspects of health and disability	1	4	23	19	89%
Communication, teaching & learning	1	6	26	14	85%
Professional ethics, values & responsibilities	2	1	26	18	93%
Management, finance & law	5	22	18	2	42%
Clinical reasoning	1	0	21	25	98%
Evidence-based practice, applied statistics	0	3	19	25	93%

Metabolomics*, body systems & interactions	1	11	22	13	74%
Differential diagnosis	0	2	22	23	96%
Medical & surgical conditions	0	1	27	19	98%

*not yet fully implemented into the curriculum

With regard to the ability to administer *tests and measures*, there is an alignment between NPTE scores and student ratings of satisfaction with their preparation. All items except one ranked above the 80% benchmark for success with 100% of students feeling confident in muscle performance, range of motion, reflex, and sensory integrity. 98% felt prepared in motor function. The one item to fall below the benchmark was ventilation and respiration or gas exchange at 75%.

Student perception of their preparation to select and administer the following tests and measures:

Core Area	Test & Measure	Poor	Fair	Good	Excellent	Good+Excellent
Cardiopulmonary	Aerobic capacity / endurance	1	2	24	20	93%
General	Anthropometric characteristics	1	6	25	15	85%
General	Assistive technology needs	1	7	19	20	83%
Neuro	Balance	0	1	13	33	91%
Cardiopulmonary	Circulation	0	6	18	23	87%
Neuro	Self-care and living skills	0	5	23	19	89%
Neuro	Cranial & peripheral nerve integrity	0	2	18	27	96%
General	Environmental factors	0	2	28	17	96%
General	Gait	1	5	16	25	87%
Specialty	Integumentary integrity	2	5	18	22	85%
Ortho	Joint integrity and mobility	0	2	13	32	96%
Neuro	Mental functions	0	9	22	16	80%
Neuro	Mobility (including locomotion)	1	1	15	30	96%
Neuro	Motor function	0	1	18	28	98%
Ortho	Muscle performance (strength, power, length, etc)	0	0	12	35	100%
Neuro	Neuromotor development & sensory processing	0	3	21	23	93%
General	Pain	0	2	14	31	96%
Ortho	Posture	0	2	15	30	96%
Ortho	Range of motion	0	0	11	36	100%
General	Reflex integrity	0	0	12	35	100%
General	Sensory integrity	0	0	18	29	100%
Ortho	Skeletal integrity	0	4	16	27	91%
Cardiopulmonary	Ventilation and respiration or gas exchange	2	10	26	9	74%

In preparation to perform specific *interventions*, students were over 90% satisfied with functional training skills, manual therapy, motor function, and patient education.

Specific intervention techniques with which the students felt less than 80% satisfaction with their preparation include biophysical agents, therapeutic exercise, and alternative therapies. It should be noted that both the labs for therapeutic exercise and biophysical agents were cancelled for this cohort in the Spring/Summer of 2020. This is a possible reason for the lower feeling of preparedness.

Student perception of their preparation to deliver the following interventions:

Core Area	Intervention	Poor	Fair	Good	Excellent	Good+Excellent
Cardiopulmonary	Airway clearance techniques	1	7	27	12	83%

Specialty	Assistive technology (prescription, application, and as appropriate, fabrication and modification)	1	6	24	16	85%
General	Biophysical agents	7	14	23	3	55%
General	Functional training in self-care and living skills	0	4	17	26	91%
Specialty	Integumentary repair and protection	1	4	22	20	89%
Ortho	Manual therapy techniques	0	4	24	19	91%
Neuro	Motor function training (balance, gait, etc)	0	3	14	30	93%
General	Patient / client education	0	4	18	25	91%
Ortho	Therapeutic exercise	5	9	16	17	70%
Specialty	Alternative therapies	4	16	23	4	57%

Combined student perception of their preparation by examination and intervention content area:

Content Area	Poor preparation	Fair preparation	Good preparation	Excellent preparation	Good+Excellent Preparation
Ortho	5	21	107	196	92.1%
Neuro	1	25	144	206	93.0%
General	10	44	190	226	88.3%
Specialties	8	31	87	62	79.3%
Cardiopulmonary	4	25	95	64	85.9%

Specialties: e.g., Wound Care & Alternative therapies

Historically, our students do excellent on clinical rotations in the community. 97% of students agreed or strongly agreed that clinical internships prepared them to integrate theoretical principles, gain exposure, apply therapeutic interventions, and document appropriately. 100% of students felt that clinical internships allowed them to become more professional, apply technical skills, master evaluation skills, utilize time management, and reinforced the value of safety.

Student perception of their learning from clinical internships are as follows:

Questions about Clinical Internships	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Agree + Strongly Agree
Clinical internships allowed me to integrate theoretical principles.	0	0	1	19	27	47	97.88%
Clinical Internships provided me with the ability to apply technical skills.	0	0	0	13	34	47	100.00%
Clinical internships provided me opportunities to master evaluation skills.	0	0	0	17	30	47	100.00%
Clinical internships provided me exposure to a variety of clinical settings.	0	1	0	13	33	47	97.87%
Clinical internships allowed me to become more professional.	0	0	0	11	36	47	100.00%
Clinical internships fostered my competency in the application of therapeutic interventions.	0	0	1	9	37	47	97.87%
Clinical internships allowed me to be able to document appropriately.	0	0	1	9	37	47	97.87%
Clinical internships allowed me to utilize time management skills effectively.	0	0	0	12	35	47	100.00%

Clinical internships reinforced the value of safety.	0	0	0	9	38	47	100.00%
Mean							99.05%

Career Plans

All 47 students report that they anticipate providing patient care full-time (42) or part-time (5). 28 student plan to practice in the state of Nevada with the next highest number being 5 who plan to practice in California. 5 report they will be working in a rural or small town area.

46 of the 47 report that they will not be involved or be involved in a limited way in research. 1 student reports they will be significantly involved.

Student Debt

The mean value for outstanding educational loans for physical therapy education for the class of 2022 is \$93,242 with a mean of \$104,612 calculated for the subset who reported PT student loan debt. 5 students report \$0 in student loans and 6 reported > \$150,000.

Cultural Climate Survey

Students were asked to respond to questions related to cultural climate from strongly disagree to strongly agree.

A high percentage of students reported agree, strongly agree, or no opinion to the following questions:

	Agree + Strongly Agree + No Opinion
Faculty in my program are well respected in their fields	100.00%
I understand what is required to complete my program and earn my degree	100.00%
I work hard to do well in my program	100.00%
My program is rigorous but fair	97.88%
I have opportunities to apply for scholarships from my department	97.88%
It is reasonable for students in my program to complete our requirements in three years	97.88%
UNLV as a whole values diversity	97.88%
Faculty in the DPT program are willing to talk with me individually	97.88%

The lowest scores on the cultural climate survey can be found below.

	Agree + Strongly Agree + No Opinion
There is the right amount of diversity in the DPT faculty	59.57%
I feel financially supported by my program	70.22%
There is the right amount of diversity in the DPT program	70.21%
I have more than one faculty mentor who is helping be through my program	76.60%
Financial support for students in my program is distributed fairly	78.73%
Faculty in the DPT program appear to give all students about the same amount of attention and support	78.72%

Alumni Survey

This survey was sent to all 2021 alumni for whom we had contact information; 12 individuals responded to at least one portion of the survey for a response rate of 28%. The results from the alumni survey indicate that overall, they felt:

1. Well prepared by their education at UNLVPT to meet the Program Outcomes. Mean = 97% Agree or Strongly Agree; also see 'Alumni Survey Table 1'.

2. Well prepared by their education at UNLVPT to engage in general areas of patient client management. Mean = 93% Satisfied or Very Satisfied; also see ‘Alumni Survey Table 2’.
3. Somewhat prepared by their education at UNLVPT to engage in specific areas of physical therapy practice. Mean = 65% Satisfied or Very Satisfied; also see ‘Alumni Survey Table 3’.
4. Prepared by their education at UNLVPT to engage in the health care system and society. Mean = 82% Agree or Strongly Agree; also see ‘Alumni Survey Table 4’.

Alumni Survey Table 1 –

Questions about Program Outcomes	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Agree + Strongly Agree
Commit to and demonstrate the professional behaviors as outlined by the American Physical Therapy Association (APTA) (i.e. Accountability, Altruism, Caring/Compassion, Excellence, Integrity, Professional Duty, Social Responsibility)	0	0	0	2	10	12	100%
I am prepared to engage in the ethical practice of physical therapy	0	0	0	4	8	12	100%
I have achieved entry-level competence in all areas of clinical practice	0	0	0	4	8	12	100%
I am able to competently address all areas of physical therapy patient/client management	0	0	0	4	8	12	100%
I am able to facilitate patient progress toward improved outcomes	0	0	0	5	7	12	100%
I am prepared to assume professional roles	0	0	0	4	8	12	100%
I am confident in engaging in evidence-based practice	0	0	0	5	7	12	100%
I am prepared to become an autonomous primary health care provider	0	0	0	4	8	12	100%
I am able to engage in physical therapy roles in prevention, health, wellness, and fitness	0	0	1	3	8	12	91.6%
I am able to provide care to rural and underserved populations	0	0	2	4	6	27	83.3%
Mean							97.4%

Alumni Survey Table 2 –

Questions about Patient Client Management	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Total	Satisfied + Strongly Satisfied
How satisfied are you with your preparation at UNLVPT in:							
Patient Examination	0	0	0	5	7	12	100%
Patient Evaluation and Diagnosis	0	0	0	6	6	12	100%
Patient Prognosis	0	0	3	7	2	12	75%
Patient Intervention	0	0	2	7	3	12	83.3%
Patient Outcomes	0	0	0	6	6	12	100%

Evidence Based Practice	0	0	0	6	6	12	100%
Mean							93.05%

The results from questions to alumni about specific areas of practice were less uniformly positive. The average for specific areas of practice fell below the 80% benchmark at nearly 65%. For specific areas of practice, 4 of the questions were above the 80% benchmark (Orthopedics and Sports, Neurologic, Geriatrics, Wound Care), and four were below 80% (Cardiopulmonary, Pediatrics, Pelvic Health, and Electrophysiology).

Alumni Survey Table 3 –

Questions about Practice Area							
How satisfied are you with your preparation at UNLVPT in the following areas of practice:	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Total	Satisfied + Strongly Satisfied
Neurologic	0	0	1	6	5	12	91.6%
Orthopedics and Sports	0	0	1	6	5	12	91.6%
Cardiopulmonary	0	0	3	4	4	12	66.6%
Pediatrics	0	0	7	2	3	12	41.6%
Wound Care	0	0	2	4	6	12	83.3%
Pelvic Health	0	2	7	2	1	12	25%
Geriatrics	0	0	1	5	6	12	91.6%
Electrophysiology	0	2	7	1	2	12	25%
Mean							65.5%

For questions about preparedness for engagement in the health care system and society there were 2 of 10 questions that fell below the 80% benchmark, and 8 were above 80%, of those 2 were 100%. The lowest score in this block of questions was 'I am apprised of and am able to implement changes in healthcare reimbursement' which was scored Agree or Strongly Agree by 50% of respondents.

Alumni Survey Table 4 –

Questions about Engagement							
How satisfied are you with your preparation at UNLVPT to engage in the health care system and society:	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Agree + Strongly Agree
I am apprised of and am able to implement changes when dealing with cost limitations	0	0	3	5	4	12	75%
I am apprised of and am able to implement changes in healthcare reimbursement	0	0	6	5	1	12	50%
I act according to the APTA Code of Ethics	0	0	2	2	8	12	83.3%
I adhere to the APTA Guide for Professional Conduct	0	0	2	2	8	12	83.3%
I willingly and adequately represent physical therapy in the larger health care arena	0	0	0	3	9	12	100%
I contribute to departmental activities where applicable	0	0	2	5	5	12	83.3%
I am involved in state and national professional organizations (e.g. APTA)	0	1	1	4	6	12	83.3%

I am prepared to perform clinical research to help validate the profession of physical therapy	0	0	2	5	5	12	83.3%
I am willing and adequately prepared to serve as a Clinical Instructor (CI) for both physical therapy and physical therapy assistant students	0	0	1	5	6	12	83.3%
I am aware of the APTA sponsored Credentialed Clinical Instructor Program (CCIP)	0	0	0	5	7	12	100%
Mean							82.4%

Employer Survey

This survey gets distributed every other year and was sent to all employers of 2020 alumni for whom we had contact information; 11 employers responded to at least one portion of the survey. Answers are scored on a 0-5 scale. The results from the employer survey indicate that overall, they felt our alumni were:

1. Able to commit to and demonstrate the professional behaviors as outlined by the American Physical Therapy Association (APTA); also see ‘Employer Survey Table 1’.
2. Prepared to engage in the ethical practice of physical therapy reflecting the core values as outlined by the APTA; also see ‘Employer Survey Table 1’.
3. Able to provide care to rural and underserved populations; also see ‘Employer Survey Table 1’.

Employer Survey Table 1

Questions about Experiences	Minimum	Maximum	Mean	Count	Percentage
Please answer the following questions based upon your experiences with UNLVPT graduates:					
They are able to commit to and demonstrate the professional behaviors as outlined by the American Physical Therapy Association (APTA) (i.e. Accountability, Altruism, Caring/Compassion, Excellence, Integrity, Professional Duty, Social Responsibility)	4	5	4.91	11	100%
They are prepared to engage in the ethical practice of physical therapy reflecting the core values as outlined by the APTA and other key documents including Guide to Physical Therapist Practice, Standards of Practice, Code of Ethics, and Guide for Professional Conduct	4	5	4.91	11	100%
They have achieved entry-level competence in all areas of clinical practice	4	5	4.82	11	100%
They are able to competently address all areas of physical therapy patient/client management including examination, evaluation, diagnosis, prognosis, intervention, and outcome measurement	5	5	4.82	11	100%
They are able to facilitate patient progress toward improved outcomes across all levels of the International Classification of Functioning, Disability, and Health including health conditions, body structure and function, activities, and participation	4	5	4.91	11	100%
They are prepared to assume professional roles including those in the areas of education, critical inquiry/research, administration, and consultation	3	5	4.45	11	82%
They are confident in engaging in evidence-based practice based on sound, critical reasoning processes	4	5	3.75	11	100%
They are prepared to become an autonomous primary health care provider within the scope of physical therapy practice to include screening/systems review, differential diagnosis, referral, and teaming as appropriate	3	5	4.45	11	91%

They are able to engage in physical therapy roles in prevention, and the promotion of health, wellness, and fitness	4	5	4.64	11	100%
They are able to provide care to rural and underserved populations	3	5	4.55	11	91%
They are able to effectively engage in the role of Clinical Instructor (CI) for both physical therapy and physical therapy assistant students	3	5	4.18	11	73%
They are able to effectively perform the role of Center Coordinator of Clinical Education (CCCE)	3	5	3.91	11	65%
Mean					92%

eCurriculum

No gaps in the curriculum have been identified when compared to requirements of our profession's accrediting body (CAPTE) according to eCurriculum reports. Course objectives also align well with APTA recommendations and UNLVPT learning outcomes.

Aggregated data from CAPTE and PTCAS reports for students starting in 2022:

Characteristics	UNLVPT	National averages (20-21)
Tuition + Fees (In-State)	\$73,776.25	\$69,418 (Public Institution)
Tuition + Fees (Out of State – 1 year)	\$91,118.25	n/a
Tuition + Fees (Out of State – 3 years))	\$125,602.25	\$114,940 (Public Institution)
Student to faculty ratio	11:1	12:1
Class size	48	46
Number of qualified applicants	313	254
Number of minority students enrolled	30/48 (62.5%)	20.1%
Class Diversity	<p>Sex: 20 Male (42%) 28 Female (58%) 0 Non-binary (0%) 0 Preferred not to self-describe (0%)</p> <p>Race: Asian 17 (35%) Black 4 (8%) Hispanic 12 (25%) Pacific islander 2 (4%) Two or more 11 (23%) White (non-Hispanic) 18 (37%)</p> <p>31% (15 of 48) PT doctoral students at UNLV reported that they were the first generation in the family to attend college.</p>	<p>Sex: Male (38%) Female (62%)</p> <p>Race: Asian (9.3%) Black (4.1%) Hispanic (6.9%) Pacific islander (0.3%) Two or more (3.8%) White (75.4%)</p> <p>14.7% of accepted PT doctoral students in America reported that they were the first generation in the family to attend college.</p>
GPA of students enrolled	3.62	3.5
Number of credits required	112	120
Core faculty who are ABPTS certified	38.4% (5/13)	48.4%

Aggregated Scholarly Activities data from FAWR reports (compared to national averages where available)

Category	UNLVPT	National averages (2020)
Faculty Publications (with or without students in authorship)	38 peer-reviewed publications 1 books or book chapters	13 peer-reviewed publications per program 1.7 books or book chapters
Grant activity		
Completed	5 core faculty with funded grants	4.1
Awarded	\$1,136,565.10	\$2,836,684
Unfunded	13	n/a
Patents, property & intellectual property	n/a	n/a
Professional presentations	46	21.4 per program
# Students funded to attend national conference	82	n/a

Conclusions and Plans

The program continues to perform at a high level with 100% pass rate on the licensure exam and high student satisfaction with their preparation related to program learning outcomes. Areas in which student satisfaction with preparation did not reach the 80% benchmark will be discussed at our faculty retreat.

Appendix D. Student reported outcomes on the 10 UNLVPT learning outcomes.

1	0.00%	0.00%	0.00%	28.57%	71.43%	100.00%
2	0.00%	0.00%	0.00%	26.19%	73.81%	100.00%
3	0.00%	0.00%	2.38%	30.95%	66.67%	97.62%
4	0.00%	0.00%	2.38%	33.33%	64.29%	97.62%
5	0.00%	0.00%	0.00%	33.33%	66.67%	100.00%
6	0.00%	0.00%	2.38%	38.10%	59.52%	97.62%
7	0.00%	0.00%	2.44%	34.15%	63.41%	97.56%
8	0.00%	0.00%	2.38%	40.48%	57.14%	97.62%
9	0.00%	0.00%	2.38%	33.33%	64.29%	97.62%
10	0.00%	0.00%	4.76%	30.95%	64.29%	95.24%

Appendix E. Student reported outcomes on preparation based on diagnostic and intervention areas for the Class of 2017 and the Class of 2021.

Student perception of the **Class of 2017** on their preparation by *diagnostic* content area:

Ortho	0.94%	1.17%	9.24%	45.91%	42.74%	88.65%
Neuro	3.19%	4.31%	27.27%	47.37%	17.86%	65.23%
Cardiopulmonary	2.70%	4.06%	43.54%	45.31%	4.39%	49.7%
Specialties	3.03%	6.82%	30.3%	50.00%	9.85%	59.85%
Complex	3.03%	5.05%	24.24%	49.50%	18.18%	67.68%

Specialties: e.g., Wound Care & Women’s Health

Student perception of the **Class of 2021** on their preparation by *diagnostic* content area:

Ortho	0.19%	0.00%	2.87%	45.60%	51.34%	96.94%
Neuro	1.60%	0.74%	8.28%	63.79%	25.59%	89.38%
Cardiopulmonary	0.56%	0.28%	1.95%	66.11%	31.11%	97.22%
Specialties	3.20%	1.93%	10.89%	63.56%	20.41%	83.97%
Complex	1.59%	0.95%	10.79%	55.87%	30.79%	86.67%

Specialties: e.g., Wound Care & Pelvic Health

Student perception of the **Class of 2017** on their preparation by *intervention* content area:

Ortho	1.01%	0.00%	7.07%	53.54%	38.38%	91.92%
Neuro	0.00%	4.55%	37.88%	48.48%	9.09%	57.57%
General	0.93	1.17%	15.75%	59.04%	23.10%	82.14%
Specialties	0.00%	0.00%	12.12%	51.52%	36.36%	87.88%
Cardiopulmonary	0.76%	2.27%	64.39%	25.00%	7.58%	32.58%

Specialties: e.g., Wound Care & Women’s Health

Student perception of **Class of 2021** on their preparation by *intervention* content area:

Ortho	0.00%	0.00%	1.85%	44.44%	53.71%	98.15%
Neuro	0.00%	0.00%	5.93%	66.67%	27.41%	94.07%
General	0.44%	0.36%	8.63%	56.06%	34.51%	90.57%
Specialties	1.11%	0.00%	7.78%	65.56%	25.56%	91.11%
Cardiopulmonary	0.00%	0.00%	2.66%	68.00%	29.33%	97.33%

Specialties: e.g., Wound Care & Pelvic Health