

PROFESSIONAL SUMMARY

Dr. Robbins is a Senior Neuromusculoskeletal, Orthopedic clinician with over 14 years of experience in biomechanical assessment, neuromusculoskeletal injury management, injury prevention, human performance optimization, and kinesiological education. As a board-certified Orthopedic Doctor of Physical Therapy, Dr. Robbins possesses over 15,000 hours of clinical experience with an extensive background in dynamic injury analysis (Infantry, Armor, and Airborne unit training), bone stress injury management, and treatment of chronic injuries and disease processes as they relate to neuromusculoskeletal conditions. He has performed duties as military medical officer for large unit treating thousands of soldiers, dependents, and retirees over a 14-year career. He acts as subject-matter-expert in several multidisciplinary care teams to include bone stress injury analysis and prevention working group (Fort Jackson, SC), Neuromusculoskeletal Injury Prevention Initiative (Fort Benning, GA), and Non-pharmacological Pain Management Working Group (Benning-Martin Army Community Hospital, Fort Benning, GA). Dr. Robbins has worked with M-CRASH Group llc as a consulting expert since 2008.

EDUCATION

Doctorate of Physical Therapy - Baylor University, 2007 Orthopedic Physical Therapy, Board Certification, 2015 Master of Science in Healthcare Administration, Baylor University, 2018 Master of Science in Business Administration, Baylor University, 2018 Bachelors of Science in Education, Central Michigan University, 1996 Bachelors of Science, Central Michigan University, 1996

PROFESSIONAL EXPERIENCE

Chief, Department of Rehabilitative Services (DRS) Present

June 2019 –

Benning-Martin Army Community Hospital, Fort Benning, Georgia

- Leads a multi-disciplinary department of over 115 staff members in six clinical disciplines: Physical Therapy, Occupational Therapy, Traumatic Brain Injury (TBI), Comprehensive Pain Management, and Chiropractic accounting for over 140,000 patient encounters annually at Benning-Martin Army Community Hospital, Fort Benning, GA.
- Assigned as senior medical officer for multi-disciplinary team focused on non-pharmacological pain management. Leads the development, implementation, and clinical outcomes for non-pharmacological pain management.
- Clinically mentors MD/DO medical residents, physician assistant phase two students, Doctorate of Physical Therapy interns in musculoskeletal clinical care.
- Established Fort Benning as the Army's only non-medical center internship site for the US Army-Baylor Doctorate of Physical Therapy (DPT) Program.

Part-Time Faculty, Columbus State University Present

January 2019 -

Department of Exercise Science and Kinesiology, Columbus, Georgia

Instruct Junior/Senior-level Kinesiology course and Identification and Management of Athletic Injury Course.

Biomechanist and Medical Researcher, M-Crash Group

June 2010 – Present

Cataula, Georgia



- Analyzed accident records, medical documentation, and related literature to determine injury threshold, occupant kinematics, and other medical related topics.
- Researches peer-reviewed literature to determine leading scientific analysis and applications to real-world injury patterns.
- Subject matter expert (SME) for human anatomy, physiology, kinematics/kinesiology, orthopedics and related diagnostic testing.
- Clinical skills include: biomechanical analysis of human anatomy, injury causation, diagnostic testing (radiographs, magnetic resonance imaging, computed tomography, bone scan/scintigraphy, injury healing patterns, post-operative orthopedic rehabilitation, fundamentals of human bones, joints, soft tissue, spine, nervous system.
- Published author relating to biomechanics of the foot and lower extremity.
- SME in bone stress injuries, airborne operational injuries, military training injuries, vehicular injury and occupant kinematics, traumatic brain injuries, non-pharmacological pain management.

Chief, Physical Therapy Department

August 2018 – June 2019

Benning-Martin Army Community Hospital, Fort Benning, Georgia

Led multidisciplinary team of over 100 personnel across multiple facilities on Fort Benning, GA.

- Led a multi-disciplinary department of over 60 staff members in three clinical disciplines: Physical Therapy, Occupational Therapy, and Chiropractic accounting for over 100,000 patient encounters annually at Benning-Martin Army Community Hospital, Fort Benning, GA.
- Clinically mentors MD/DO medical residents, physician assistant phase two students, Doctorate of Physical Therapy interns in musculoskeletal clinical care.
- DRS Subject-Matter-Expert during transition from Army Medical Command to Defense Health Agency.

Chief, Physical Therapy Department 2016

May 2014 - May

Moncrief Army Community Hospital, Fort Jackson, South Carolina

- Orchestrated staff of over 40 full-time personnel including nine physical therapists, 14 physical therapy technicians, three medical support assistants, and 14 civilian athletic trainers.
- Acted as Senior MSK clinician and subject-matter-expert in bone stress injury prevention and advanced clinical management for Fort Jackson, SC.
- Acted as clinically mentors for Virginia College of Osteopathic Medicine (VCOM) third-year medical students during orthopedic and musculoskeletal clinical rotations.
- Assisted with clinical beta testing of the Army's "Medical Readiness Assessment Tool" maximizing both clinical and operational manpower decisions and Soldier deployment readiness.

Director Warrior Training & Rehab Program, Physical Therapist

May 2012-April 2014

187th Ord, Battalion, Fort Jackson, South Carolina

- Director of fast-paced rehabilitation clinic specializing in long-term, musculoskeletal injury rehabilitation, and training reintegration for over 350 Soldiers annually.
- Utilized specialized knowledge of medical health care and bone stress injuries to coordinate advanced musculoskeletal care resulting in 95%+ return to duty rate over this time.

Lead Medical Officer

July 2010 – April 2012

193rd Infantry Brigade, Fort Jackson, South Carolina

- Coordinated care for an infantry unit of over 12,000 Soldiers annually.
- Conducted key training leading to earlier treatment and reductions in training related injuries, saving over 10,000 hours of lost training time annually, equating to cost savings of over \$250,000.

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• Spearheaded critical injury surveillance initiative leading to improvements in training strategies and injury recognition resulting in earlier diagnosis and treatment of bone stress injuries.

Lead Musculoskeletal Clinician

May 2008 - June 2010

4th Brigade, 1st Infantry Division, Fort Riley, Kansas

- Coordinated musculoskeletal care and injury prevention for infantry brigade of over 2,500 Soldiers.
- Performed diagnostic tests, developed rehabilitative plan of care, created injury prevention, studied injury trends to
 include biomechanical factors to determine root cause and establish corrective measures across the brigade.
- Acted as SME and orthopedic liaison for all musculoskeletal injuries, traumatic injuries, and casualty care.

Officer-in-Charge, Traumatic Brain Injury (TBI) Clinic June 2007 - May 2008

Irwin Army Community Hospital, Fort Riley, Kansas

- Coordinated TBI care for Fort Riley, Kansas with over 50,000 Soldiers.
- Performed diagnostic tests, developed rehabilitative plan of care, created injury prevention, studied injury trends to include biomechanical factors to determine root cause and establish corrective measures across the installation.
- Acted as TBI SME for Irwin Army Community Hospital to include diagnostics testing and rehabilitative care.

RESEARCH PUBLICATIONS

Robbins, T. L. (2018). What the Military Health System Can Learn from Private Sector Mergers and Acquisitions. *Military Medicine*, *183*(7-8), 146-150.

Teyhen, D. S., Thomas, R. M., Roberts, C. C., Gray, B. E., Robbins, T., McPoil, T., & Molloy, J. M. (2010). Awareness and compliance with recommended running shoe guidelines among US Army soldiers. *Military medicine*, *175*(11), 847-854.

US-ARMY BAYLOR UNIVERSITY: Doctorate of Physical Therapy Curriculum

The five-semester curriculum includes outlined academic courses and clinical experiences, a research project, and a comprehensive oral examination.

Semester I

PT 6120 Evidenced Based Practice I

PT 6150 Introduction to Therapeutic Intervention

• **PT 6150 Introduction to Therapeutic Intervention** - This class will introduce students to basic terminology and concepts in prescribing therapeutic exercise to address impairments in motion, strength, and function. The class will consist of lecture and lab periods.

PT 6231 Clinical Pathophysiology

• PT 6231 Clinical Pathophysiology - Fundamental concepts of pathophysiological processes of injury and disease as related to causes, mechanisms, clinical manifestations, diagnostic techniques and management.

PT 6240 Clinical Medicine I

• PT 6240 Clinical Medicine I - This class consists of topics in pathology, medicine, and surgery with emphasis on signs and symptoms resulting from abnormalities, disease, or trauma that produce disorders of movement.

PT 6310 Anatomy I

• PT 6310 Anatomy I - A discussion of the normal anatomy of epithelial, connective, muscle, and nervous tissues including osteology and arthrology. A discussion of the peripheral and the autonomic nervous systems. An indepth study of the gluteal, thigh, knee, leg and foot regions including extensive dissection and prosection study of each region.

PT 6330 Neuromuscular Physiology

PT 6400 Physical Therapy Fundamentals

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• PT 6400 Physical Therapy Fundamentals - This course is comprised of a wide spectrum of introductory material including biomechanics and kinesiology goniometry, manual muscle testing, handling and positioning of patients, basic ambulation, joint and soft tissue mobilization and manipulation, written and oral communication, components of a basic physical exam, planning treatment programs, patient management issues, and professional ethics.

PT 6470 Research Methods I

• PT 6470 Research Methods I - This course is an in-depth analysis of Research Design, Statistics, and Critical Appraisal of Research Literature. This course is designed to introduce students to the basic and advanced concepts, techniques, and technologies used in the scientific inquiry of applied clinical research. Topics to be investigated include the research process and the scientific method, measurement theory, indices of validity and reliability, hypothesis construction and testing, constructing a clinical question, sampling, data collection and coding schemes, experimental design, a hierarchy of evidence, survey research, and guides for critical appraisal of research.

PT 6501 Musculoskeletal Physical Therapy I – Lower Member

• PT 6501 Musculoskeletal Physical Therapy I - Lower Member - This course includes the biomechanics and kinesiology of the Lower Member. This course coupled with the Anatomy of the Lower Member, is designed to prepare clinicians to competently examine a patient with lower extremity dysfunction, evaluate the information and establish a clinical diagnosis, and develop a physical therapy intervention plan. Consequently, a large portion of the time will be spent in the laboratory setting practicing palpation skills, clinical tests and therapeutic treatment techniques.

Total 25 sem. hrs.

Semester II

PT 6104 Diagnostic Imaging and Procedures

• PT 6104 Diagnostic Imaging & Procedures - An eclectic collection of topics related to issues in radiology and nuclear medicine. The emphasis is placed on museuloskeletal imaging with plain fi lms, CT scans and MRI. In addition, instruction in medical laboratory diagnostic tests for physical therapists is provided. Lecture and laboratory work in electrophysiologic testing (EMG & NCV) is conducted.

PT 6121 Evidenced Based Practice II

PT 6151 Pharmacology for Physical Therapists

PT 6151 Pharmacology for Physical Therapists - Prepare uniformed services physical therapists for their role
as physician extenders by providing instruction in general pharmacologic principles, drugs prescribed by
physical therapists, drugs with significant impact on physical therapy practice and issues related to drug
prescription.

PT 6153 Orthotic and Prosthetic Interventions

• PT 6153 Orthotics and Prosthetics Interventions - Functional and surgical anatomy of upper and lower member amputations and conditions requiring upper/lower member and spinal orthotic intervention are presented. Physiology/pathophysiology of upper and lower member amputations to include predisposing and complicating factors of traumatic and surgical amputations as well as etiology and response to treatment are covered. The physiologic effects of and response to upper/lower member and spinal orthotic intervention are discussed. Conditions requiring amputation intervention and orthotic use are presented and the biomechanical principles of prosthetic and orthotic fabrication are outlined as are the indications for their selection and use. All phases of upper/lower amputee management are covered in depth and include: preoperative phase, early postoperative phase, rehabilitative phase, and prosthetic fitting phase. Psychomotor tasks related to the upper/lower amputee and the upper/lower member and spinal orthotic patient care are practiced. Discharge planning and self-care/prevention techniques for the amputee and orthotic patient are discussed.

PT 6241 Clinical Medicine II

PT 6252 Physical Agent Interventions

PT 6332 Physiology of The Oxygen Delivery System

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PT 6402 Musculoskeletal Physical Therapy II – Spine

• PT 6402 Musculoskeletal Physical Therapy II – Spine - An introduction to the biomechanics, kinesiology, and specific terminology of spinal movement. An integrated model of physical therapy evaluation of spinal disorders will be presented. A treatment regimen of manual therapy (muscle energy techniques, mobilization, and manipulation) combined with patient education and exercise will build upon the models previously presented in PT 6150 and PT 6501 courses.

PT 6403 Musculoskeletal Physical Therapy III – Upper Member

• PT 6403 Musculoskeletal Physical Therapy III - Upper Member - This course consists of approximately forty-six hours of lecture and lab on biomechanics, examination, and treatment of the shoulder and fi fty-six hours of lecture and lab on biomechanics, examination, and treatment of the elbow, wrist, and hand. The purpose of this course is to prepare the physical therapy student to independently perform an examination and design an appropriate intervention program for a patient with upper extremity disorders. To meet this objective, the student must have a thorough understanding of the anatomy and biomechanics of the upper member. In addition, the student needs to be aware of the many conditions that can cause upper extremity problems and the principles followed in the design of the intervention program. This course will systematically provide instruction in the above areas.

PT 6411 Anatomy II

• **PT 6411 Anatomy II -** An in-depth study of the back, thoracic wall, abdominal wall, anterior thoraco-lumbar spine, anterior cervical spine, shoulder, arm, forearm and hand. A discussion of the facial, TMJ structures, and the genitourinary system in an appropriate context for a physical therapist.

Total 23 sem. hrs.

Semester III

PT 6107 Emerging Topics in Physical Therapy

PT 6122 Evidenced Based Practice III

PT 6142 Clinical Medicine III PT 6206 Cardiopulmonary Physical Therapy

PT 6212 Neuroanatomy PT 6313 Neuroscience

• PT 6212 Neuroanatomy - A discussion of the normal anatomy of the brain and spinal cord and their supporting structures. Introduction to the Pain and Temperature, Discriminatory Touch and Conscious Proprioception, and Pyramidal Motor Pathways. In depth study of the microscopic structures of the central nervous system. A problem-solving approach to fundamental neuroanatomical pathologies.

PT 6405 Neuromuscular Physical Therapy

• PT 6405 Neuromuscular Physical Therapy - The physical therapy examination, evaluation, and intervention of clients with neurological conditions, including, but not limited to: spinal cord injury, stroke, traumatic brain injury, multiple sclerosis and Parkinson's disease. Therapeutic interventions for clients with neurological impairment to be discussed include, but are not limited to: ADL and functional training, assistive/adaptive devices, electrical stimulation, biofeedback, therapeutic exercise including PNF, facilitation/inhibition procedures, gait and balance training, orthoses, hydrotherapy, patient and family education.

PT 6760 Physical Therapy Practice I

Total 21 sem. hrs.

Semester IV

PT 6123 Evidenced Based Practice IV

PT 6181 Physical Therapy in Deployed Environments

PT 6182 Injury Control and Prevention

PT 6208 Lifespan Physical Therapy

PT 6208 Lifespan Physical Therapy - Physical therapy examination, evaluation, diagnosis, prognosis, and
intervention in pediatric and geriatric clients with neuromusculoskeletal disorders. A framework of normal
development and aging will be presented and serve as a course foundation.

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PT 6209 Primary Care Musculoskeletal Physical Therapy

• PT 6209 Primary Care Musculoskeletal Physical Therapy - To provide lectures and lab experiences on advanced techniques in differential diagnosis and intervention particularly in primary care settings. This course will expand on the lecture and lab material taught in the first three semesters. The emphasis will be on topics in musculoskeletal differential diagnosis.

PT 6254 Advanced Joint Manipulative Interventions PT 6280 Executive Skills for Physical Therapists PT 6761 Physical Therapy Practice II PT 6371 Research Methods II **Total 21 sem. hrs.**



