|  |
| --- |
| * + 1. Elderly
1. Techniques for the measurement of gait and posture
2. Normal and pathological gait
3. Treatment of gait and postural abnormalities
4. Biomechanical and theoretical approaches to gait and posture
5. Mathematical models of joint and muscle mechanics
6. Neurological and musculoskeletal function in gait and posture
7. The evolution of upright posture and bipedal locomotion
8. Adaptations of carrying loads
9. Walking on uneven surfaces
10. Climbing stairs
11. Running and performing other movements
12. Spinal biomechanics during usual activities
13. Psychometric properties of commonly-used outcome measurements in neurological disorders including MS, CVA, Parkinson
14. Posture and gait evaluations by single- and dual-task paradigms in neurological disorders including MS, CVA, Parkinson.
15. Association between cognitive-balance function in elderly populations.
	* 1. Electro physical Agents

TENSNeuromuscular electrical stimulationIDCGalvanic currentLaserUltrasoundThermal agents including hot pack and infraredUltravioletDiathermyMicrowave* + 1. Measurement

Reliability and validity of outcome measures including, kinetic and kinematicResponsiveness of outcome measures including, kinetic and kinematicAccuracy of diagnostic measures including, kinetic and kinematic measurement Electromyographic Measurements to explore movement Disorders* + 1. Mental Health

Cognitive therapy in patients with mental health disordersAlzheimer and dementia* + 1. Musculoskeletal

Posture and gait evaluation by single- and dual-task paradigms in musculoskeletal injured patients including low back pain, ACL-injured patients, and ankle injuries.Psychometric properties of commonly used outcome measurements in musculoskeletal injured patients.Physiotherapy for musculoskeletal disordersDiagnostic and therapeutic processesPatient centered careGuidelines for musculoskeletal therapeutics and theoretical models that support developments in assessmentDiagnosis, clinical reasoning, and interventions* + 1. Neurology

CNS autoimmune diseasesTraumatic brain injurySpinal cord injuryGuillain barre syndromeAmyotrophic lateral sclerosis (als)Neuro-oncologyMechanisms of neurodegenerative diseasesAlzheimer’s disease and other dementiasParkinson’s diseaseHuntington’s diseaseCerebral disordersMotor neuron diseasesEpilepsyPsychiatric disorders Association between cognitive-balance function in neurological disordersStroke RehabilitationCognitive disorders* + 1. Orthopedics

Post-operative rehabilitationSpinal column disordersPeripheral joint disordersOsteoarthritisFracturesSport-related injuriesTraumatic injuriesOveruse injuriesInterventional studies for clinical practice guidelines in musculoskeletal disorders including peripheral joints and vertebral columnRehabilitation Developments in Sport Medicine* + 1. Pediatrics

Cerebral palsyErb palsyMotor delayDown syndromeDuchenne syndromeSpina bifidaCognitive disorders Neurodevelopmental disordersNeuromuscular conditionsMusculoskeletal conditionsCardiorespiratory conditionsDevelopmental conditionsPediatric exercise science * + 1. Respiratory

COPD diseaseAsthmaBronchiectasis PneumoniaAirway clearance techniquesActive cycle of breathing techniques* + 1. Rheumatology

Therapeutic methods (exercise, splinting, hydrotherapy, surgery) OsteoarthritisRheumatoid arthritisAnkylosing spondylitisLupus erythematosusPolymyositisScleroderma* + 1. Women's Health

Physical therapy for women’s healthMusculoskeletal disorders following pregnancyPelvic health of children and adultsMusculoskeletal, urological, gynecological systems as well biomechanical foundations and psychosocial aspects* + 1. Tele-rehabilitation
		2. Physical Conditioning
		3. Professional Development
		4. Service Delivery
 |