VIRGINIA C. CRAWFORD RESEARCH INSTITUTE
AT SHEPHERD CENTER

Active Research Projects JANUARY 2020

ASSISTIVE TECHNOLOGY RESEARCH

Project #674
LiveWell RERC R1. Discovery of User Needs and Preferences for Information and Communication Technologies: Priority Needs and Access Issues (Mike Jones, PhD, John Morris, PhD)

Project #676
LiveWell RERC: R2 - Factors Affecting Acceptance of ICT by People with Disabilities and Caregivers. (John Morris, PhD)

Project #678
LiveWell RERC: Tech Factory. (John Morris, PhD)

Project #731
Usability Lab: Tech Access Network. (John Morris, PhD)

Project #752
LiveWell RERC: BreatheWell Wear 2.0. (Tracey Wallace, CCC-SLP)

Project #763
Performing home evaluations using new technology on mobile platforms. (Mike Jones, PhD)

Project #803
Disability and Rehabilitation Research Project (DRRP): App Factory. (Michael Jones, PhD., Erin Radcliffe, BS, BME)

MULTIPLE SCLEROSIS RESEARCH

Project #552
A Randomized, Double-Blind, Double-Dummy, Parallel-Group Study To Evaluate The Efficacy And Safety Of Ocrelizumab In Comparison To Interferon Beta-1a (Rebif®) In Patients With Relapsing Multiple Sclerosis - Genentech current protocol WA21092 (OPERA). (Ben Thrower, MD, Carlyn Kappy, RD, LD, CCRP)

Project #662
Long term, prospective, multinational, parallel-cohort study monitoring safety in patients with MS newly started on fingolimod once daily or treated with another approved disease-modifying therapy – Novartis #CFTY720d2403 - Passage” (Ben Thrower, MD, Elizabeth Gonzales, CCRP)

Project #667
Successful Employment And Quality Work Life after Severe Disability: Comparison Of Predictive Models With Multiple Sclerosis And Spinal Cord Injury. Stage II: Quantitative Study of Factors Related to Successful Employment. (Deborah Backus, PT, PhD)

Project 690
Severity of Illness, Parenting, and Child Psychological Adjustment: Exploring the Associations among Mothers with Multiple Sclerosis. (Emily Stewart)
Project #706
An Open-Label, Single-Arm Study To Evaluate The Effectiveness And Safety Of Ocrelizumab In Patients With Early Stage Relapsing Remitting Multiple Sclerosis (Protocol # MA30143)
(Ben Thrower, MD, Carlyn Kappy, RD, LD, CCRP)

Project #710
(Ben Thrower, MD, Elizabeth Gonzales, CCRP)

Project #713
Shepherd Center MS Outcomes Data Registry (Deborah Backus, PT, PhD)

Project #722
Pilot Study Evaluating Functional Outcomes in People with MS who participate in the Shepherd Can Do MS Program. (Deborah Backus, PT, PhD)

Project #733
Validation of a Fall Prevention Program Among Non-Ambulatory Wheeled Mobility Device Users with Multiple Sclerosis. (Deborah Backus, PT, PhD)

Project #735
Assessing Relationships Between Cognitive Function and Brain Atrophy in MS Patients.
(Guy Buckle, MD)

Project #738
Comparative Effectiveness of an Exercise Intervention Delivered via Telerehabilitation and Conventional Mode of Delivery. (Deborah Backus, PT, PhD)

Project #739
A Multicenter Randomized, Double-Blind, Placebo-Controlled Study in Subjects With Relapsing Multiple Sclerosis to Evaluate the Efficacy and Safety of BIIB033 as an Add-On Therapy to Anti-Inflammatory Disease-Modifying Therapies. (Ben Thrower, MD)

Project #761
(Ben Thrower, MD, Michelle Tidwell, RN, BSN, CCRP)

Project #769
Pilot Study to Evaluate the Unique Contributions of Electrical Stimulation to Muscle Fatigue and Symptoms in People with MS. (Deborah Backus, PT, PhD)

Project #772
A Randomized, Controlled, Open-Label, Rater-Blinded, Phase 3b Study of the Efficacy, Safety, and Tolerability of 6-Week Extended Interval Dosing of Natalizumab (BG00002) in Subjects With Relapsing-Remitting Multiple Sclerosis Switching From Treatment With 4-Week Natalizumab Standard Interval Dosing (SID) in Relation to Continued SID Treatment – Biogen NOVA (Protocol ID: 101MS329) (Ben Thrower, MD)
Project #776
Pilot Study Evaluating Functional and Wellness Outcomes of the Shepherd Can Do MS Program
(Deborah Backus, PT, PhD)

Project #781
Feasibility of the Multiple Sclerosis Performance Test for Assessment of Functional Performance Measures in Patients with Multiple Sclerosis. (Deborah Backus, PT, PhD, Casey Kandilakis, PT)

Project #783
The Potential Relationship between MS lesion load and Clinical Walking Outcomes.
(Deborah Backus, PT, PhD, Joy Williams)

Project #784
The role of marriage in the adoption of healthy behaviors in people with MS.
(Kevin McCully, PhD, Deborah Backus, PT, PhD)

Project #792
Helping People with MS Help Themselves: Are Self-management Strategies Needed for People with MS. (Louise Palmer)

Project #794
An Observational study of Ocrelizumab treated patients with Multiple Sclerosis to Determine the incidence and mortality rates of Breast Cancer and all malignancies. (Ben Thrower, MD)

Project #799
A Phase 3, External Placebo-Controlled, Open-Label, Multicenter Study to Evaluate the Efficacy and Safety of Ravulizumab in Adult Patients with Neuromyelitis Optica Spectrum Disorder (NMOSD), ALXN1210-NMO-307. (Guy Buckle, MD, Casey Kandilakis, PT)

Project #800
Helping People with MS Help Themselves: Are Self-management Strategies Needed for People with MS? Phase 2: Focus Groups with People with MS and their Support Partners. (Louise Palmer)

Project #801
Qualitative Evaluation of the STEP for MS Trial. (Deborah Backus, PT, PhD)

SPINAL CORD INJURY RESEARCH

Project #446
A Phase 1 Safety Study of GRNOPCI in Patients with Neurologically Complete, Subacute, Spinal Cord Injury (David Apple, MD, Michelle Tidwell, RN)

Project #453
Humanitarian Use Device – DPS (Brock Bowman, MD, Ismari Clesson, RN, CCRP)

Project #587
Systematic Assessment of Caregiving Skill Performance by Individuals with Tetraplegia and Their Caregivers. (John Morris, PhD)
Project #614
Indego Generation Two Fit and Functionality. (David Apple, MD, Clare Hartigan, PT)

Project #629
Dose-Response Effects of Whole Body Vibration on Spasticity and Walking in SCI. (Edelle Field-Fote, PhD, Elizabeth Sasso-Lance, PT; Bradley Farrell, PhD)

Project #640
A Long-term Follow-up Study of Subjects with Cervical Spinal Cord Injuries Who Received AST-OPC1 in Protocol AST-OPC1-01” Asterias AST-OPC1-02. (Donald Leslie, MD, Ismari Clesson, RN, CCRP, Michelle Tidwell, RN, BSN, CCRP)

Project #643
A Randomized Controlled Study to Evaluate the Effectiveness of the Precision Spinal Cord Stimulator System at Sub-Perception Amplitude” Boston Scientific A4046 WHISPER. (Erik Shaw, DO, Elizabeth Gonzales, CCRP)

Project #665
Intermittent Hypoxia-Induced Recovery of Overground Walking in Persons with Subacute SCI. (Randy Trumbower, PT, PhD, Elizabeth Sasso-Lance, PT)

Project #691
Conditioning Neural Circuits to Improve Upper Extremity Function. (Edelle Field-Fote, PhD)

Project #693
Adaptation and validation of a quantitative measure of upper extremity spasticity for use in persons with cervical spinal cord injury. (Edelle Field-Fote, PhD)

Project #696
Combined Influence of Transcutaneous Spinal Cord Stimulation and Locomotor Training on Spasticity and Walking Outcomes after Spinal Cord Injury. (Stephen Estes, PhD - Research Fellowship)

Project #703
SCIMS Project 1: Enhancing Corticospinal Activation for Improved Walking Function. (Edelle Field-Fote, PhD)

Project #707
A Multi-Center, Randomized, Placebo-Controlled, Double-Blinded, Trial of Efficacy and Safety of Riluzole in Acute Spinal Cord Injury. (Faiz Ahmad, MD, Alex Hall) (Grady Collaboration)

Project #709
Emergency Department Visits, Related Hospitalizations, and Reasons for Utilization of the Emergency Department after SCI. (James Krause, PhD, Jennifer Coker)

Project #712
Chart Review of Spinal Cord Stimulation after Spinal Cord Injury (Bradley Farrell, PhD)

Project #715
Diet Composition and Cardiometabolic Risk Reduction in Adults with SCI. Protocol #F151001005. Sponsor NIH; In collaboration with UAB (Brooks Wingo, PhD; Edelle Field-Fote, PhD)
Project #717
Incorporation of Surface Electrode Functional Electrical Stimulation System in Indego Exoskeleton. (Donald Leslie, MD)

Project #720
The Effects Of Traumatic Spinal Cord Injury On Basal Metabolic Rate During The Acute and Post-Acute Stages of Recovery. (David Apple, MD, Carlyn Kappy, RD, LD, CCRP)

Project #721
Determinants of Upper Extremity Functional Capabilities in Tetraplegia. (Edelle Field-Fote, PhD)

Project #723
Enhancing Corticospinal Excitability to Improve Functional Recovery. (Jennifer Iddings, PhD)

Project #729
Improving Quality of Personal Care Assistance Services for People with SCI through Online Education. (John Morris, PhD)

Project #732
Managing Edema after Spinal Cord Injury with Techniques Utilized to Treat Lymphedema. (Rebecca Hammad, MHS, OTR/L CLT)

Project #737
SCI Model System of Care Data Collection (MASTER GRANT 2016 - 2021) (Edelle Field-Fote, PhD)

Project #741
A Blended Residential/Telehealth Lifestyle Intervention to Improve Cardiovascular Health and Manage Pain in Adults with SCI: A Pilot Study. (James Rimmer, PhD, Elizabeth Sasso-Lance, PT)

Project #749
Development of Crosswalks to Aggregate International Spinal Cord Injury Functional Data. FIM/SCIM III data will be used. (Linda Jones, PT)

Project #750
Using a Health Technology Assessment Framework for Evaluating the Utilization and Efficiency of Wearable Exoskeletons for SCI Rehabilitation. (Edelle Field-Fote, PhD, Cathy Furbish, PT)

Project #758
A Longitudinal Survey of SCI Patients Using the Mobile SCI-Ex App to Support a Home Exercise Routine (Mike Jones, PhD)

Project #762
Random Noise Stimulation to Enhance Corticomotor Drive for Improved Hand Function. (Anastasia Zarkou, PT, PhD)

Project #770
Evaluating the long-term effects of an activity-based therapy (ABT) exercise program (ACTION Trial) for individuals with chronic spinal cord injury: Long-term follow up to determine lasting impact on walking outcomes. (Mike Jones, PhD)
Project #771
Dose-Response Effects Associated with Intensity of Transcutaneous Spinal Cord Stimulation on Spasticity after Spinal Cord Injury (Edelle Field-Fote, PhD; Evan Sandler)

Project #777
Influence of Whole Body Vibration on Neuromodulation of Ankle Muscles in Persons with SCI (Edelle Field-Fote, PhD; Jasmine Hope)

Project #778
Preliminary Assessment of the Anti-Clonus Functional Electrical Stimulation Device for Wheelchair Propulsion. (Adrew Ekelem, PhD)

Project #779
A Multicenter, Two Part (Open-Label Single-Ascending Dose Followed by Double-Blind, Placebo-Controlled Repeat Dose) Study to Evaluate the Safety, Tolerability, Pharmacokinetics, and Efficacy of AXER-204 in Subjects with Chronic Spinal Cord Injury (the RESET* Study). (Donald Peck Leslie, MD; Michelle Tidwell, RN, BSN, CCRP)

Project #780
Pilot Study of Spinal Cord Stim for Pain and Motor Control after Spinal Cord Injury. (Brad Farrell, PhD)

Project #787
Influence of Wearable Intensive Nerve Stimulation on Spasticity and Function in Persons with Spinal Cord Injury. (Edelle Field-Fote, PhD)

Project #796

Project #804
Validation of Self-reported Severity and Level of Spinal Cord Injury. (Edelle Field-Fote, PhD, Catherine Furbish, PT)

Project #805
Tracking Activity to Improve the Prognosis of Mobility After Spinal Cord Injury. (Edelle Field-Fote, PhD, Elizabeth Sasso-Lance, PT)

STROKE RESEARCH

Project #745
Right-Brain Dominance in Left Middle Cerebral Artery Stoke: A Case Study. (Jessica Robbins, PhD)

Project #748
Right ICA CVA after Malignant Carotid Body Tumor Resection: A Case study and Implications for Rehabilitation. (Jessica Robbins, PhD)

Project #798
Case Study of how iLS (Integrated Listening Systems) Focus unit treatments can improve gait & balance abilities of a client post-stroke - A single patient clinical case study. (Julia Fortna, OT)
CONCUSSION, TRAUMATIC/ACQUIRED BRAIN INJURY RESEARCH

Project #454
A Prospective Analysis of Therapeutic Treatments and Their Impact on Acute TBI Rehabilitation Outcomes (Ron Seel, PhD)

Project #588
Feasibility and Utilization of an Upper Limb Exoskeletal Device in Acute Acquired Brain Injury Rehabilitation. (Kathy Farris, OT)

Project #683
Use of Behavioral Informatics to Support Safety and Activity Independence in the Home. (Ron Seel, PhD)

Project #695
Characterization of Post-concussive Vestibular Impairment Brain Structural and Functional Connectivity Dysfunction and the Impact of Vestibular Rehabilitation. (Rusty Gore, MD)

Project #714
TBI Outcomes and Differences in Acute Care at a Southeastern Level I Trauma Center (Ron Seel, PhD, Tolu Oyesanya, PhD)

Project #724
Transition Needs of Patients with TBI Discharged Home from Acute Care and Their Family Caregivers. (Tolu Oyesanya, PhD)

Project #726
Grading Symptom Responses to Engaging Video Attributes after Concussion (Russell Gore, MD)

Project #736
Effectiveness of Trigger Point Dry Needling for Lateral Epicondylitis Versus Lateral Epicondylosis: A Report Comparing Two Cases. (April Hodge, PT) (SHARE Program)

Project #740
The Effect of Mindfulness on Cognition and Self-Awareness after Acquired Brain Injury (Katy O’Brien, PhD)

Project #743
A Tool to Support Patient-Centered Goal Attainment Scaling for Cognitive Rehabilitation. (Tracey Wallace, CCC-SLP)

Project #773
Magnetic Resonance Spectroscopy Applications in Disorders of Consciousness (MRS for DoC) (Candace Fleischer, PhD (Emory))

Project #782

Project #785
tDCS paired with exercise and attention training compared with exercise alone with attention training for mTBI. (April Hodge, PT.)
Project #786  
SUCCESS: Success in College after Concussion with Effective Student Supports. (Tracey Wallace, CCC-SLP)

Project #790  
Veteran goal directed comprehensive care outcomes in chronic mild traumatic brain injury.  
(Tracey Wallace, CCC-SLP)

Project #797  
Minimal Clinical Important Difference (MCID) of gait speed and subjective balance in individuals with vestibular disorders (Deidentified Chart Review). (April Hodge, PT)

Project #806  
Effectiveness of Peer Support on Caregivers of Persons with Acquired Brain Injury. (Mike Jones, PhD.)

PAIN MANAGEMENT RESEARCH

Project #775  
A retrospective chart review of percutaneous peripheral nerve stimulation for the treatment of peripheral nerve pain. (Erik Shaw, DO)

NEUROPSYCHOLOGY RESEARCH

Project #701  
Shepherd Center Neuropsychology Data Registry Research Protocol. (Laura Hoskins, Psy.D.)

Project #802  
The Practice Committee of APA Division 22 State of Field Survey for Rehabilitation Psychology. (Laurie Nash, PhD)

OUTCOMES RESEARCH

Project #603  
A Patient-Centered Approach to Successful Community Transition after Catastrophic Injury  
(Mike Jones, PhD)

PUBLIC HEALTH

Project #793  
Public Health Priorities As Reflected by American Corporate Philanthropy. (Ford Vox, MD)