Active Research Projects SEPTEMBER 2018

ASSISTIVE TECHNOLOGY RESEARCH

Project #410
Rehabilitation Engineering Research Center (RERC) on Wireless Technologies (Michael Jones, PhD, John Morris, PhD)

Project #674
LiveWell RERC R1. Discovery of User Needs and Preferences for Information and Communication Technologies: Priority Needs and Access Issues (Michael 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 #731
Usability Lab: Tech Access Network. (John Morris, PhD)

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

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, Nell Klein, RN, CRRN, CCRC)

Project #564
A Multicenter, Observational, Open-Label, Single-Arm Study of Tysabri in Early Relapsing-Remitting Multiple Sclerosis in Anti-JCV Antibody Negative Patients - Protocol #101MS407 – Biogen (STRIVE) (Ben Thrower, MD, Nell Klein, RN, CRRN, CCRC)

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 #670
Pilot Study to Explore the Effectiveness of FES Lower Extremity Cycling to Improve Walking in People with Multiple Sclerosis. (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 #694
PRIME: Engaging MS Providers to Improve Multiple Sclerosis Outcomes Through Effective Coordination of Care - Protocol #5619. (Guy Buckle, MD, Elizabeth Gonzales, CCRP)

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

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 #746
Study to Determine Reliability of Accelerometer based Mechanomyography as a Measure of Muscle Endurance in People with MS. (Deborah Backus, PT, PhD)

Project #751
A 3-Arm, Multicenter, Double-Blind, Placebo-Controlled, Randomized Study to Assess the Efficacy and Safety of ADS-5102 Amantadine Extended Release Capsules in Multiple Sclerosis Patients with Walking Impairment - Adamas ADS-AMT-MS301. (Ben Thrower, MD, Michelle Tidwell, RN, BSN, CCRP)
Project #761
A Multicenter, Open-Label Safety and Efficacy Study of ADS 5102 Amantadine Extended Release Capsules in Patients with Multiple Sclerosis and Walking Impairment. Admas ADS-AMT-MS302. (Ben Thrower, MD, Michelle Tidwell, RN, BSN, CCRP)

Project #767
A Pilot Single-Center Study of a Manualized Resilience-Based Telehealth Program for Support Partners of Persons with Multiple Sclerosis R-PILO-MSOO-010-0002. (Elizabeth Halstead, PhD and Deborah Backus, PT, PhD)

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)

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, Rachel Betzler, Research Coordinator)

Project #639
A Phase 1/2a Dose Escalation Study of AST-OPC1 in Subjects with Cervical Sensorimotor Complete Spinal Cord Injury" Asterias AST-OPC1-01. (Donald Leslie, MD, Ismari Clesson, RN, CCRP, Michelle Tidwell, RN, BSN, CCRP)

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 #660
Engineering Assessment of the Indego® Software Controllers – Parker #ENG1 (Donald Leslie, MD, Casey Kandilakis, PT)

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

Project #677
Improving Safety and Independence following SCI. (Ron Seel, PhD)

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

Project #684
Validation of an Established Participation Measure in a Different Population: SCI (Julie Gassaway, RN, MS)

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 #708
Phase 2b/3, Double-blind, Randomized, Placebo-Controlled, Multicenter Study to Assess the Efficacy and Safety of VX-210 in Subjects with Acute Traumatic Cervical 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 #711
Characterizing the Experience of Spasticity after Spinal Cord Injury (Cathy Furbish, PT)

Project #712
Chart Review of Spinal Cord Stimulation after Spinal Cord Injury (Bradley Farrell, PhD)
VIRGINIA C. CRAWFORD RESEARCH INSTITUTE
AT SHEPHERD CENTER

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 #716
Phase 2b/3, Double-blind, Randomized, Placebo-Controlled, Multicenter Study to Assess the Efficacy and Safety of VX-210 in Subjects with Acute Traumatic Cervical Spinal Cord Injury. (James Lindley, MD; Donald Leslie, MD) (Savannah Collaboration)

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 #730
Patient Report of Intermittent Catheterization Experience. (Tammy King, BSN, MSN)

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 #742
Evaluating the Utilization and Efficiency of Wearable Exoskeletons for SCI Rehabilitation. (Edelle Field-Fote, PhD)

Project #744
Project Workout on Wheels Internet Intervention (WOWii): Summative Evaluation with Randomized Clinical Trial - Baylor University. (Katherine Froehlich-Grobe, PhD)

Project #747
“A retrospective chart review of opioid prescription practices in the acute rehabilitation of neurological patients - 10/1/2014 through 11/1/2017” (Gerald Bilsky, MD)
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 #753
The effect of joint mobilization on ROM and spasticity. (Brian Maloney, 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 #759
Implementation of an effective peer mentoring program for patients with spinal cord injury - Multi center PCRO Grant Submission - pending funding

Project #760
Understanding, Predicting, and Preventing Life-Changing and Life-Threatening Health Changes among Aging Veterans and Civilians with Spinal Cord Injury. (James Krause, PhD)

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

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

Project #765
Influence of Upper Extremity Vibration on Spasticity and Function in Persons with Tetraplegia. (Edelle Field-Fote, PhD)

Project #768
Gait Box Testing at Shepherd Center. (Mike Jones, PhD)

STROKE RESEARCH

Project #700
Evaluating the Indego Exoskeleton for Persons with Hemiplegia Due to CVA. (Donald Leslie, MD, Clare Hartigan, PT)

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)
VIRGINIA C. CRAWFORD RESEARCH INSTITUTE
AT SHEPHERD CENTER

Project #754
(Michael Goldfarb, PhD, Elizabeth Sasso-Lance, PT)

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 #627
Safe@Home: A Self-Management Program for Individuals with Traumatic Brain Injury and Their Families. (Ron Seel, PhD, Nicole Thompson)

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 704
Long Term Outcomes for Persons with Disorders of Consciousness. (Andrew Dennison, 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 #727
The Effects of Yoga on People with Traumatic Brain Injury Related to Sleep and Mood. (Lauren Tudor, CTRS, YT)

Project #728
Evaluating Brain Injury Clubhouses and their Effects on Neurobehavioral Functioning and Participation (Jason Young, MSW, Ron Seel, PhD)
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, SLP)

Project #766
Prevalence of lower extremity deep vein thrombosis and its clinically relevant factors in patients admitted to the inpatient acquired brain injury program at Shepherd Center. (Andrew Dennison, MD)

PAIN MANAGEMENT RESEARCH
Project #702
Prospective, R+C22 Randomized Clinical Trial of Evoked Potential Measures Using the Senza™ Spinal Cord Stimulation (SCS) System (Nevro). (Erik Shaw, DO, Bradley Farrell, PhD, Barry McKay, BS)

NEUROPSYCHOLOGY RESEARCH
Project #701
Shepherd Center Neuropsychology Data Registry Research Protocol. (Laura Hoskins, PsyD.)

OUTCOMES RESEARCH
Project #603
A Patient-Centered Approach to Successful Community Transition after Catastrophic Injury (Michael Jones, PhD, Julie Gassaway, RN, MS)