

# Current Research Studies at Drake Center

Updated: September 15, 2009

Title of Study, Principle Investigator (PI) Setting/Subjects, & Contact Information	Description and Status
<p><b>Outcomes And Resource Utilization In Dialysis Patients In A Long Term Care (LTAC) Facility - A Quality Improvement Initiative</b></p> <p>PI: Charuhas Thakur, MD; UC Dept Internal Medicine</p> <p>Setting/Subjects: Inpatients &amp; Outpatients</p> <p>For more information contact Drake Director of Clinical Research <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>This is a data registry study to determine outcomes among persons receiving dialysis.</p> <p>Status: Ongoing and enrolling</p>
<p><b>A Comparative Study Of Falls And Fall-Risk Assessments In Older Adults Living In An Assisted Living Facility And A Retirement Community</b></p> <p>PIs: Arvind Modawal, MD; Sandra Regan, PhD; UC Dept Family Med</p> <p>Setting/Subjects: Bridgeway Point residents</p> <p>For more information contact Drake Director of Clinical Research <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>This is a cohort study to determine if older adults who fall are different from those who do not fall in performance and compliance in fall-risk assessment tests.</p> <p>Status: Completed</p>
<p><b>Motor Imagery To Reduce Stroke-Related Arm Impairment</b></p> <p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Outpatient/community</p>	<p>This is a randomized control trial to determine the efficacy of motor imagery and occupational therapy compared to stroke education and occupational therapy in reducing impairment and improving function among persons with 1-10 years post stroke.</p> <p>Status: Ongoing and enrolling</p>

<p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	
<p><b>Electrical Stimulation For Upper Limb Recovery In Stroke</b></p> <p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>This is a multisite randomized control trial to determine the effectiveness of upper extremity transcutaneous neuromuscular electrical stimulation among acute patients less than 12 weeks post stroke. Outcomes include motor impairment, functional activity limitation and EMG activation patterns.</p> <p>Status: Ongoing but enrollment completed</p>
<p><b>Efficacy Of The FES (Bioness H200) In Upper Limb Recovery In Stroke</b></p> <p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>The purpose of this randomized control trial is to determine the most effective dose of functional electrical stimulation (FES) delivered through an upper extremity neuroprosthesis currently on the market (Bioness H200) among persons at least 6 months post stroke.</p> <p>Status: Ongoing but enrollment completed.</p>
<p><b>Computer Assisted Biofeedback Leg Exercise (CABLE) And Gait In Persons With Stroke: A Randomized Control Trial</b></p> <p>PI: Kari Dunning, PhD, PT, University of Cincinnati Dept Rehabilitation Sciences</p> <p>Setting/Subjects: Outpatient/community</p> <p>Contact information: <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>This is a randomized control trial to determine the effect of a computer assisted biofeedback leg exercise among persons with ankle weakness at least 6 months post stroke. Changes in function, balance and gait will be compared between persons receiving physical therapy and computer assisted leg exercises (virtual reality system) versus persons receiving physical therapy alone.</p> <p>Status: Ongoing but enrollment completed.</p>
<p><b>A Pilot Study of the Orthosis System</b></p> <p>PIs: University of Cincinnati Dept Engineering students: Crystal Coolbaugh, Rebecca Mollere, Emily Schoettmer; Faculty Advisor, Stephen Page, PhD University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p>	<p>This pilot study will determine the efficacy of a commercially available carbon graphite ankle foot orthosis, the ToeOFF®, to improve walking gait in 3 outpatient persons with stroke (at least one year post stroke) and with the condition of drop foot. This study will also examine the feasibility of supplementing the AFO with two possible ankle supports.</p>

<p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p><b>Status: Completed</b></p>
<p><b>Stroke Patients' And Therapists' Opinions Of Constraint Induced Movement Therapy: A Regional Replication Study</b></p> <p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>Constraint induced therapy (CIT) has been shown to be effective in improving function for persons with stroke. However, for some persons it is a strenuous protocol with up to 8 hours of training per day. The study aims are to determine stroke patients and therapist opinions regarding CIT.</p> <p>Status: Ongoing and enrolling</p>
<p><b>A Pilot Study Of The Nustep, Fitted With Electric Stimulation</b></p> <p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Inpatient &amp; Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>The aim of this pilot study will be to determine the feasibility and efficacy (including leg movement, impairment and gait velocity) of a regimen of affected leg training using the NuStep device with functional electric stimulation for persons with chronic stroke.</p> <p>Status: Ongoing but enrollment completed</p>
<p><b>The Core Tx For Stroke Patient Movement: A Pilot Study</b></p> <p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>The aims of this pilot study are to determine the impact of a rehabilitation program for the affected arm that incorporates the Core Tx on affected arm impairment, disability and quality of life in chronic stroke patients.</p> <p>Status: Ongoing but enrollment completed.</p>
<p><b>Efficacy Of Orthotic Device Incorporating Electrical Stimulation On UE Spastic Hemiparesis In Stroke</b></p>	<p>The aim of this pilot study is to determine the impact of an ODES regimen for 3 chronic stroke patients with moderate UE spasticity</p>

<p>PI: Steve Page, PhD, University of Cincinnati Dept Rehabilitation Sciences, PM&amp;R and Neuroscience</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>on spasticity and impairment, disability and ability to perform valued activities.</p> <p>Status: Ongoing but enrollment completed.</p>
<p><b>The Cycle Of Stress On Chronic Wound Healing</b></p> <p>PI: Trisch Hoge, RN (Northern KY University graduate student)</p> <p>Setting/Subjects: Outpatient/community</p> <p>Contact information: <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p> <p>For more information contact Drake Director of Clinical Research <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>The purpose of the study is to find out whether stress affects wound healing.</p> <p><b>Status: Completed</b></p>
<p><b>Incontinence-Associated Dermatitis (IAD) Wound Prevalence Study</b></p> <p>PI: Mary Arnold-Long, RN, Drake Center</p> <p>Setting/Subjects: Inpatient</p> <p>For more information contact Drake Director of Clinical Research <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>This is a follow-up study to the pilot study performed in February 2007. This will be a 12 week prospective cohort study. The aims of the study are to: 1) describe the prevalence of incontinence associated dermatitis (IAD); 2) describe the nosocomial incidence of IAD and pressure ulcers and; 3) describe factors associated with development of IAD &amp; pressure ulcers.</p> <p>Status: Enrollment completed.</p>
<p><b>Determining the effect of Changing Central Line Needle-less Hubcaps Prior to Obtaining Blood Samples from a Central Line</b></p> <p>PI: Alice Mathew, RN, Drake Center</p> <p>Setting/Subjects: Inpatient</p> <p>For more information contact Drake Director of Clinical Research</p>	<p>When patients with central lines are tested for infection, blood is drawn from both the central line and the arm. The tip of your central line where the blood is drawn is called a hubcap. We are doing this study to determine if changing this hub prior to drawing the blood increases the accuracy of the diagnosis for infection.</p> <p><b>Status: Completed</b></p>

<a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a>	
<p><b>Computer-Assisted Biofeedback Leg Exercise (CABLE) And Gait In Persons With Subacute Stroke: A Pilot Study</b></p> <p>PI: Kari Dunning, PhD, PT, University of Cincinnati Dept Rehabilitation Sciences</p> <p>Setting/Subjects: Outpatient/community</p> <p>Contact information: <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>The purpose of this research study is to determine the effectiveness of computer assisted biofeedback leg exercise (CABLE) in combination with physical therapy (PT) compared to PT alone in persons 3-6 months post stroke</p> <p><b>Status: Completed</b></p>
<p><b>Effects of Using the L300 for Persons with Stroke: A Clinical Case Series Pilot Study</b></p> <p>PI: Kari Dunning, PhD, PT, University of Cincinnati Dept Rehabilitation Sciences</p> <p>Setting/Subjects: Outpatient/community</p> <p>Contact information: <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>Functional electrical stimulation (FES) to the lower leg stimulates the nerve and muscles and pulls your foot up for you during walking. Previous FES units were cumbersome and not easy to use throughout the day at home or during therapy. The purpose of this research study is to assess changes in function and walking with use of the L300 for persons more than 6 months post stroke.</p> <p>Status: Ongoing but enrollment completed</p>
<p><b>Peroneal Functional Electrical Stimulation for Persons with Acute Stroke: A Pilot Study</b></p> <p>PI: Kari Dunning, PhD, PT, University of Cincinnati Dept Rehabilitation Sciences</p> <p>Setting/Subjects: Inpatient rehab</p> <p>Contact information: <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>After stroke it is common to have drop foot (difficulty pulling up your foot using your ankle muscles). Functional electrical stimulation (FES) to the lower leg stimulates the nerve and muscles and pulls your foot up for you during walking. Previous FES units were cumbersome and not realistic during inpatient rehabilitation. A new technology FES unit (L300) is now available that is easier to use. The L300 is FDA approved for persons with stroke but it is not known whether it improves outcomes if used during inpatient rehabilitation. The purpose of this research study is to determine changes in function with use of the L300 during inpatient rehabilitation.</p> <p>Status: Ongoing</p>
<p><b>Randomized Evaluation of Carotid Occlusion and Neurocognition (RECON)</b></p>	<p>The purpose of this research study is to determine the relationship between mental functioning and blood flow in the brain among</p>

<p>PI: Paul Newman, PhD, Drake Center</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information contact Drake Director of Clinical Research  <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>patients that have already consented to participate in the Carotid Occlusion Surgery Study (COSS). The COSS study evaluates whether a surgical operation, bypass surgery, can reduce the chance of a stroke in someone who has complete blockage in one main artery in the neck that supplies blood to the brain (the carotid artery). The operation bypasses the blockage so more blood can flow to the brain. Only people with decreased blood flow to the brain, as demonstrated on a PET (positron emission tomographic) scan, are randomized into the COSS study. RECON will evaluate whether restoring the blood flow to the brain (with EC-IC Bypass surgery) will also improve mental functioning. Participants in both the surgical and medical groups of the COSS study will participate in the RECON study. By comparing the mental functioning of the participants in both treatment groups over the course of 2 years, the investigators hope to know by the end of the study whether the EC-IC bypass operation also helps improve mental functioning.</p> <p>Status: Ongoing</p>
<p><b>The Effect of Open Versus Capped Tracheostomy on Swallowing</b></p> <p>PI: Brad Carr, MA, CCC/SLP; Melanie Bradle MA, CCC/SLP; Drake Center</p> <p>Setting/Subjects: Inpatient</p> <p>For more information contact Drake Director of Clinical Research  <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>The purpose of this research study is to determine the effect of tracheostomy tubes on the ability to swallow.</p> <p>Status: Ongoing and enrolling</p>
<p><b>Effect of Fish oil – eicosapentaenoic acid (EPA) and docosahexanoic acid (DHA) on chronic ventilator patients in a long term acute care setting.</b></p> <p>PI: Mary Kaplan, MEd, RD, LD, Drake Center</p> <p>Setting/Subjects: Inpatient</p>	<p>The purpose of this research study is to determine the effectiveness of adding fish oil (omega 3 fatty acid supplement) to a tube feeding for persons on ventilators. We are especially interested in changes in infections and inflammatory markers.</p> <p>Status: Ongoing and enrolling</p>

<p>For more information contact Drake Director of Clinical Research <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	
<p><b>Over Ground Body-Weight Support for Gait Training in Persons with Chronic Stroke: A Feasibility Study</b></p> <p>PI: Pierce Boyne, UC graduate DPT student; Faculty Advisor. Kari Dunning, University of Cincinnati Dept Rehabilitation Sciences</p> <p>Setting/Subjects: Outpatient/community</p> <p>Contact information: <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>Body weight support (BWS) during walking provides support to persons so they are not required to bear full weight on their legs. BWS also prevents falls, allowing persons to practice walking without being afraid. The purpose of this research study is to determine the effects of BWS sit to stand training and BWS over ground walking.</p> <p>Status: Ongoing</p>
<p><b>Effectiveness of a New Collaborative Approach to Therapy for Patients on Mechanical Ventilation.</b></p> <p>PI: Shannon Dunn, Toni Harris</p> <p>Setting/Subjects: Inpatient</p> <p>For more information contact Drake Director of Clinical Research <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>This is a study to determine the effectiveness of a new program. The new program involves a collaborative approach to providing therapy to patients on mechanical ventilation. Literature demonstrates benefits of physical and occupational therapy for mechanically-ventilated patients, a significant population at Drake Center. Because cardiopulmonary function varies in response to exercise, working with vent patients can be physically challenging, anxiety-producing, and inefficient in care delivery. In April 2007, a new program was developed which combined respiratory therapy into physical and occupational therapy treatment sessions to facilitate earlier and more advanced rehab therapy, while safely managing the patient's cardiopulmonary status. The focus of the program was to improve patients' functional outcomes and vent weaning success, reduce patient and therapist anxiety, and increase interdisciplinary educational opportunities.</p> <p>Status: Ongoing but no enrollment for this study</p>
<p><b>Interactive Metronome (IM) for persons with stroke</b></p> <p>Val Hermann, MS, OT</p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or phone 513-418-4750 or email <a href="mailto:Valerie.Hill@uc.edu">Valerie.Hill@uc.edu</a></p>	<p>The objective of this research is to determine if using a special computer system during your therapy will improve your strength and coordination of your affected arm. Muscle stiffness, weakness, and lack of coordination after a stroke has a great effect on how severely disabled you are and your quality of life after a stroke.</p> <p>Status: Enrolling</p>

## News Studies as of September 2009

<b>Title of Study / Principle Investigator (PI) Setting/Subjects and Contact Information</b>	<b>Description</b>
<p><b>Clinical decision-making by speech-language pathologists during AAC evaluations.</b></p> <p>Setting/Subjects: Outpatient/community</p> <p><b>Contact: Aimee Dietz, Ph.D., 513-558-8551 (<a href="mailto:aimee.dietz@uc.edu">aimee.dietz@uc.edu</a>)</b></p>	<p>The purpose of this research is to explore how speech-language pathologists, with varying levels of augmentative and alternative communication (AAC) experience, perceive the evaluation process and how they carry out an evaluation based on initial referral information.</p> <p>Status: Ongoing and enrolling</p>
<p><b>Caregiver Perceptions of Communication/Stroke Support Groups</b></p> <p>Setting/Subjects: Outpatient/community</p> <p><b>Contact: Aimee Dietz, Ph.D., 513-558-8551 (<a href="mailto:aimee.dietz@uc.edu">aimee.dietz@uc.edu</a>)</b></p>	<p>The purpose of this research is to find out why family members of people participate in stroke support groups.</p> <p>Status: Ongoing and enrolling</p>
<p><b>Role of Visuographic Support and Written Information on the Communication of People with Aphasia.</b></p> <p>Setting/Subjects: Outpatient/community</p> <p><b>Contact: Aimee Dietz, Ph.D., 513-558-8551 (<a href="mailto:aimee.dietz@uc.edu">aimee.dietz@uc.edu</a>)</b></p>	<p>The purpose of this study is to test whether pictures help people with aphasia communicate better.</p> <p>Status: Ongoing and enrolling</p>
<p><b>SCI Mental Practice Impact on Gait and Cortical Organization in spinal cord injury</b></p> <p>Setting/Subjects: Outpatient/community</p> <p>For more information: <a href="http://www.rehablab.org">www.rehablab.org</a> or 513-558-2754 (Phone) or email <a href="mailto:Stephen.Page@uc.edu">Stephen.Page@uc.edu</a></p>	<p>The objective of this research is to determine if mentally practicing walking improves the ability to walk for persons with spinal cord injury. Volunteers will be given physical therapy for their legs and may also mentally rehearse the exercises that they do during therapy. A brain scan may also be performed to determine how the ankle movement is represented in the brain.</p>

	<p>This will allow us to figure out the part of the brain that may control walking, and how it is “rewired” as a result of the therapy program.</p> <p>Status: Ongoing and enrolling</p>
<p><b>Acute longitudinal transcranial magnetic stimulation (TMS) after stroke</b></p> <p>Setting/Subjects: Inpatient rehabilitation through 6 months post stroke</p> <p>Kari Dunning, PT, PhD <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p><i>The objectives</i> of this longitudinal study are: 1) determine the ability of brain mapping (transcranial magnetic stimulation or TMS) to predict functional recovery after stroke; 2) determine changes in cortical activity from acute (2 weeks post) to chronic stroke (6 months post); 3) determine changes in the TMS recruitment curve (slope) measured in the same anatomical location; 4) determine if the location of the cortical activity has moved, suggesting neuroplasticity.</p> <p>Status: Ongoing and enrolling</p>
<p>Measurement Properties of Gait Speed, the Walking Ability Questionnaire, and Stroke Impact Scale</p> <p>Setting/Subjects: Outpatient/community</p> <p>Kari Dunning, PT, PhD <a href="mailto:kari.dunning@uc.edu">kari.dunning@uc.edu</a></p>	<p>The <u>purpose of this study</u> is to compare changes in <i>therapist measures</i> (for example walking speed) with <i>patient perceptions</i> of how they’ve changed since starting physical therapy. The overall goal is to determine minimal changes in gait speed that are clinically meaningful to the therapist and patient.</p> <p>Status: Ongoing and enrolling</p>