

### Year 2 TRIPLL Work in Progress Seminars (WIPs)

Month	Presenter(s)	Topic of Presentation
September	Christopher Murtaugh, PhD, Associate Director, Center for Home Care Policy and Research, Visiting Nurse Service of NY (VNSNY)	This presentation was based on an R01 application to investigate the comparative effectiveness of usual care for older home health patients admitted with activity-limiting pain, versus usual care plus a physical therapist delivered cognitive-behavioral pain self-management program. The intervention was recently piloted for the selected patient population of racially-diverse older adults. Randomization will be at the physical therapist team level, with geographically-based teams randomly selected to provide the program in addition to usual care, versus usual care alone.
	Cary Reid (TRIPLL Investigator)	The proposed project addressed the problem of chronic non-cancer pain (CNCP) in older persons, a prevalent, morbid, and costly disorder associated with a substantial burden of suffering. Pharmacotherapies remain the principal treatment for CNCP, but concerns regarding analgesic-related adverse events constitute a major barrier to using this treatment approach, particularly among older persons with CNCP. This proposal sought to test an innovative platform of mobile healthcare technologies in the form of sensors, data recorders and communication networks that could—if employed during the initiation and titration phases of analgesic treatment—help to successfully address this barrier. The investigators hypothesized that use of the technologies when linked with timely provider responses, had significant potential to transform the management of not only CNCP, but acute and cancer-related pain as well. The long-range aim of this proposed project is to improve the health and well being of individuals who suffer from CNCP. The specific aims of this proposal are to: 1) Identify barriers and facilitators to use of mobile healthcare technologies as pain management tools in the home and clinical practice environment; 2) Establish the feasibility of using the devices among older adults with CNCP; 3) Determine the types of monitored data that should prompt provider alerts; and 4) Establish the feasibility of using the technologies at the provider level.
October	Una E. Makris, MD Associate Research Scientist, Section of Rheumatology Yale University School of Medicine	The proposed research was to investigate the impact of restricting back pain (back pain severe enough to restrict activity) in older persons using a mixed-methods approach. The quantitative specific aim included longitudinal analysis using the Yale Precipitating Events Project, the cohort used in preliminary work. The project was interested in determining the association between restricting back pain and subsequent disability (in ADL and mobility) over the 11 year follow-up period. The qualitative specific aim was to evaluate the impact of restricting back pain from the diverse older person's perspective using focus groups. Using these two methods provided a more comprehensive understanding of the impact of restricting back pain than either approach alone.
	Josh Willey, MD Assistant Professor Division of Stroke, Columbia University Medical Center	This was a K-23 resubmission to the NINDS titled "Neuro-vascular disease as a cause of impaired mobility". It was based on the Northern Manhattan Study, a prospective cohort study of vascular disease risk factors in a tri-ethnic community. Included in the proposal will be measures of gait and balance.
November	Janey C. Peterson, EdD, MS, MA, RN Assistant Professor of Clinical Epidemiology in Medicine, Cardiothoracic Surgery and Integrative Medicine Director of Clinical	Dr. Peterson would join TRIPLL near the start of year two of the five-year funding period and launch the research supplement, which is a logical extension of the parent grant. At the completion of the supplement, she will develop an independent research project for submission to an external funding agency during year four of the TRIPLL funding. The presentation discussed the proposal as well as other avenues of engagement.

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	Research, Division of Clinical Epidemiology and Evaluative Sciences Research, Center for Integrative Medicine, Weill Cornell Medical College	
	TRIPLL staff	TRIPLL was in the process of creating a registry for adults who are age 60+ living with chronic pain in the New York City area. The presented plan was to recruit individuals with diverse pain conditions such as, osteoarthritis, back disorders and neuropathies that are willing to participate in studies involving pain in older adults. The primary purpose of the registry = to facilitate research in this area.
December	Thelma Mielenz (TRIPLL Investigator)	“Relation between the perceived neighborhood physical environment and physical activity levels in adults with arthritis” was reviewed and received feedback on its feasibility and approach.
	Karen Graziano, LCSW, TRIPLL affiliate	Resilience, or the ability of a person to bounce back from adversity, has been identified as an important factor in the pain experience. Resilience occurs through the experience of positive emotions and leads to decreased pain catastrophizing. The project proposed adapting and pilot testing a group-based positive psychology and volunteerism intervention in a clinical practice setting to teach older adults with persistent pain how to harness their positive emotions. The investigators hypothesized that a learned positive psychology intervention will lead to greater resilience among chronic pain patients. Greater resilience can give pain sufferers tools to bounce back from adverse events and can lead to improved pain, psychological and physical outcomes.
January	TRIPLL staff, Cary Reid (TRIPLL Investigator)	TRIPLL partnered with the Central Harlem Senior Citizens Coalition (CHSCC) to adapt the Arthritis Self Help Program for older African American participants. To do this, we gave the Arthritis Self Help Program six times at the CHSCC. Seniors who participated in the course and center staff decided to continue meeting as a pain management support group once the formal 6-week Arthritis Self Help Course ended. Participants report that the continuation course “Beyond the Pain” has helped them to maintain the benefits they experienced in the Arthritis Self Help Course. They also indicated that they would like to help bring Beyond the Pain to other senior centers in the Harlem community. We proposed to partner with the CHSCC and participants in Beyond the Pain to disseminate the Arthritis Self Help Course + Beyond the Pain to Harlem senior centers.
	Sam K. Yohannan, PT, MS, Senior Physical Therapy Specialist, Burn Research (NYP/WC)	The purpose of the paper was to determine the additive value of Wii during acute post-burn rehabilitation on pain, anxiety, active range of motion (AROM), function and enjoyment, and its relationship to presence. Overall, the pattern for outcomes were positive for those receiving Wii with traditional burn therapy, the most favorable being for pain reduction. Although statistical significance was not reached in any category, it is expected that with a larger sample size, significance would be seen in multiple variables with adjunctive use of Wii in burn rehabilitation. Based on findings of our previous Wii study, the proposal seeks to investigate the efficacy of a new video game technology during post-burn rehabilitation, i.e, Microsoft’s X Box 360, KINECT. Outcomes of interest will include pain and 1-2 other most appropriate variables.
February	Nathaniel Berman, MD, Nephrologist, Rogosin Kidney Center, Instructor in Medicine, Weill	The proposed project seeks to address the gap of inadequate symptom management in a vulnerable and understudied patient population, i.e., patients with End-Stage Renal Disease (ESRD) receiving hemodialysis. The specific aim of the study is to ascertain which symptoms are deemed most burdensome in the most high-risk chronic dialysis population (the subset of frail elderly with multiple co-morbidities and decreased functional status ineligible for transplantation) and determine the extent to which the symptoms are iatrogenic.

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	Cornell Medical College Assistant Attending Physician, NewYork-Presbyterian Hospital/Weill Cornell	These data will be used to develop and pilot test a multi-component palliative care intervention in year 2 that seeks to reduce and/or prevent burdensome symptoms in the target population, increase patient participation in plan of care decision making, and thereby improving quality of life. The investigators hypothesize that in some cases reductions in symptom burden will occur by discontinuing potentially toxic, non-evidence-based interventions. The project's long-range goal is to rigorously determine the intervention's efficacy and cost-effectiveness.
	George Lewis, PhD; Thelma Mielenz, PT, PhD, OCS; Chris Visco, MD	More than 7 billion dollars are spent each year in the U.S. from some form of shoulder pain. A large portion of this spending is prescription pharmaceuticals, which currently dominate the treatment options due to widespread insurance coverage and convenience. Late in 2010 the FDA pulled two additional prescription pain medications from the market containing proxiphyne for serious cardiac side effects. A recent executive summary from AHRQ concluded future research is still needed on nonoperative treatments for shoulder pain. This project proposes to evaluate <i>the clinical effectiveness</i> of a <i>wearable</i> low intensity ultrasound system for noninvasive treatment of shoulder pain in older adults.
March	George Lewis, MS/PhD Graduate Student, Cornell University, Charles Henderson, Senior Research Associate, College of Human Ecology Cornell University	This was an R03 grant application resubmission to study the pain relief associated with an innovative portable ultrasound device that will deliver low intensity therapeutic ultrasound (LITUS) to a group of 200 patients with the diagnosis of osteoarthritis (OA) of the knee. The application addressed a significant clinical problem given the aging population in this country.
	Karl Pillemer, (TRIPLL Investigator)	This proposal is one that was being re-worked for two purposes: submission as a pilot project to Cornell's Atkinson Center for a Sustainable Future; and possible submission to the Environmental Protection Agency's Environmental Education Grant program. Both are in the \$50,000 - \$100,000 range. The less familiar format of the proposal is that required by the EPA. In brief, for the past several years the investigators have been developing and pilot testing a program designed to facilitate environmental volunteerism by retirees over the age of 60. The Retirees in Service to the Environment (RISE) program offers training in environmental issues and in leadership skills, after which participants engage in a volunteer project. RISE aims to both promote active volunteerism among older people, as well as addressing pressing problems related to environmental conservation and sustainability.
April	Matthew Baldwin, Clinical Fellow, Department of Pulmonary, Allergy, and Critical Care Medicine New York Presbyterian Hospital Columbia University College of Physicians and Surgeons	The project proposed to perform a pilot study to prospectively characterize longitudinal trends in expectations and treatment preferences of elderly ICU survivors, their primary surrogates, and physicians over the post-ICU discharge period. The investigators hypothesized that: <ol style="list-style-type: none"> <li>1. Patients have significant pain and palliative needs that are not addressed after the care transition from hospital to skilled-care.</li> <li>2. Patient and surrogate expectations for functional independence and survival at 1 year are initially higher than physicians' expectations, but decline over time while a desire for palliative and hospice care develops.</li> </ol>
	Katherine Ornstein, MPH, Mount Sinai Visiting Doctors	Homebound patients are a growing population of patients with limited access to routine medical care. While these patients receive in-home primary care services for a wide range of illnesses including dementia, congestive heart failure, depression, and cancer, there is little known about the symptom burden experienced

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	<p>Program, Division of General Internal Medicine, The Samuel Bronfman Department of Medicine, Mount Sinai School of Medicine,</p>	<p>in this population. The Mount Sinai Visiting Doctors Program, a large home-based primary care program which provides routine medical, urgent and palliative care in patient's homes, received funding to examine symptom burden in this population with the goals of reducing burden in this population over time. We have collected data and are in the process of preparing manuscripts for publication.</p>
<p>May</p>	<p>Christopher Murtaugh, PhD, Associate Director, Center for Home Care Policy and Research, Visiting Nurse Service of NY (VNSNY), Charles Henderson, Senior Research Associate, College of Human Ecology Cornell University, Cary Reid (TRIPLL Investigator)</p>	<p>The original proposal was submitted to AHRQ's Comparative Effectiveness portfolio in October 2010. In preliminary work the investigators translated a cognitive-behavioral pain self-management (CBPSM) protocol that was effective in reducing chronic back pain among individuals at senior centers, for use in home health care targeting patients with activity-limiting pain. The proposal has requested AHRQ funding to conduct a cluster randomized controlled trial to compare the effectiveness of usual care provided to home health patients admitted with activity-limiting pain, to usual care plus instruction by physical therapists in CBPSM techniques. The original proposal was ranked at the 16<sup>th</sup> percentile and has been advised by AHRQ that it is above their very tight funding line. The investigators plan to resubmit the proposal by July 5<sup>th</sup>, the next resubmission deadline for R01's.</p>
	<p>Rosemary Bakker, Research Associate in Gerontologic Design, Weill Cornell Medical College, David Feathers, Assistant Professor Of Ergonomics And Human-Centered Design, Cornell University</p>	<p>There is a significant cohort of older adults with osteoarthritis of the hip and knee who are surgically adverse and live with chronic pain. When a patient experiences pain during self care (e.g., bathing), the patient's dysfunction (e.g., osteoarthritis of the knee or hip), is often targeted in an intervention to the exclusion of investigating the interaction between the older user's capabilities and the designed environment (e.g., a high bathtub wall). A growing number of environmental studies on retrofitting the home environment for enhanced patient functioning have been conducted with varying successful outcomes (e.g., increased functional independence, reduced pain levels, reduced health care costs) in older patients with a wide range of activity limitations, but the authors know of no studies to date that have been targeted to patients who present with chronic pain, including patients with persistent hip and knee pain who are surgery averse. A broader understanding of the functional movement within activities of daily living is needed to ascertain to what extent environmental solutions can mitigate pain and enhance function for this targeted patient cohort. The short term goal of this pilot study is to develop a needs assessment tool, the Daily Interaction with the Environment Method (DIEM), targeting surgically adverse patients with persistent hip and knee pain. DIEM will be a micro analysis tool that combines critical body movements, compensatory behaviors, and assessment of pain levels during self care activities to analyze the person-environment fit. This would allow for more targeted interventions that minimize physical effort or change the muscle force, torque, or joint angle during activity-causing pain.</p>