

RFA 34305-22117  
CMPQJ CHECKLIST

Applicants Name:	Required Element:	PASS	FAIL
Tennessee Technological University			
<b>Page(s) #:</b>			
Pages 1-2	Cover letter is included and addressed to: Vincent Davis, State Survey Agency Director 665 Mainstream Drive, 2nd Floor Nashville, TN 37243	✓	
Pages 1-2	Cover letter is signed by facility administrator if nursing home or signed by project administrator if other.	✓	
Page 14	CMS Fillable Application ( <b>Attachment 1</b> ) is included and is signed by an individual who can legally sign a contract with the State of Tennessee. (Expand up to maximum of 20 pages including all attachments.)	✓	
Page 14	All applicable blanks are completed in CMS application including Tax Identification number, and if applicable, Medicare/Medicaid numbers.	✓	
Pages 15-17	Submitted the completed Excel budget spreadsheet and budget details page ( <b>Attachment 2</b> ) for the project, along with a narrative explanation of the costs.	✓	
Page 11	Job descriptions for key personnel are included (one page limit).	✓	
Pages 11-12	Biographical sketches/Curriculum Vitae for currently employed key personnel are included (one page limit).	✓	
Page 13	Project organizational chart is included and significant collaborators are identified.	✓	
Page 3	Project Title information is included per CMS application.	✓	
Page 3	Required Abstract information is included per CMS application.	✓	
Page 4	Statement of Need information is included per CMS application, and addresses possible problems and contingency plan.	✓	
Pages 4-7	Project Description information is included per CMS application and includes projected outcomes, the timeline, deliverables, benchmarks, and dates.	✓	
Pages 7-8	Results Measurements information is included per CMS application and identifies what data will be measured, how and when it will be measured, and who will measure it.	✓	
Pages 8-9	Description of how the nursing home community and governing body will assist and provide support for the project which is included per CMS application.	✓	
Pages 9-10	Identification and list of all organizations and subcontractors that will receive funds from this grant are included per CMS application (i.e., specific nursing homes, hospitals, local community agencies, etc.).	✓	

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Pages 18-19	Letters of commitment/agreement from all organizations and subcontractors that will receive funds from this grant are included per Request for Application.	<input checked="" type="checkbox"/>	
Pages 20	General Assurances form is included and signed per Request for Application.	<input checked="" type="checkbox"/>	

Primary Evaluator Signature and Date:

 8/30/16



## Whitson-Hester School of Nursing

TENNESSEE TECH

Box 5001 • Cookeville, TN 38505-0001 • Ph. 931-372-3203 • Fax 931-372-6244  
khanna@tntech.edu • <http://www.tntech.edu/son>

August 18, 2016

Vincent Davis, State Survey Agency Director  
665 Mainstream Drive, 2<sup>nd</sup> Floor  
Nashville, TN 37243

Dear Mr. Davis:

I am pleased to apply for the Nursing Home Civil Monetary Penalty Quality Improvement (CMPQI) Program Implementation Funding Opportunity, requesting \$165,951 in funding to improve quality of life for Alzheimer's and dementia patients in multiple nursing homes in the Upper Cumberland region of Tennessee. The proposed project targets three out of the five focus areas in the RFA: "Implementation of culture change initiatives that go beyond regulatory requirements to improve quality of care and life"; "Improve quality of life and care of residents through person-centered care"; and "Reduction of unnecessary antipsychotic medication use among nursing home residents."

As faculty in nursing academia, my team and I are cognizant of the value the academic community can contribute when partnering with nursing homes to improve the quality of resident-centered care. The Whitson-Hester School of Nursing (WHSON) at Tennessee Tech University would love the opportunity through this grant to provide funding and manpower (faculty and students) to five nursing homes to implement and certify them in the Music and Memory program. In addition, we also want to partner with and assist the only nursing home in the area that is currently certified to have the Music and Memory program in its facility, thereby, helping them to sustain their program and allowing us to learn from the successes and challenges they experienced during their initial implementation of the program. The WHSON is located in Cookeville, TN, which is part of the Upper Cumberland Region, an area covering 14 counties in Middle TN. The school offers a baccalaureate in nursing to both traditional BSN and RN-BSN students and a Master of Science in Nursing through the TN eCampus collaborative consortium. The school's mission is to provide a strong academic program in nursing with a commitment to meeting the healthcare needs of the population of the Upper Cumberland. The goal of the BSN program is to prepare graduates with a dedication to lifelong success as rural and urban area nursing leaders who are committed to professional nursing standards; open to the changes occurring in a global health care system; and motivated to improve the health status of individuals, groups, and communities.

The purpose of this grant opportunity is multi-dimensional:

1. To implement the Music and Memory program (<http://musicandmemory.org/>) in five nursing homes in the Upper Cumberland region of Tennessee.

2. To provide evidence-based practice to support the improvement of physical, cognitive, and emotional functioning of Alzheimer's and dementia patients through the implementation of this program.
3. To provide evidence-based practice to support the reduction of the use of antipsychotic medications in nursing home residents after the implementation of the Music and Memory program.

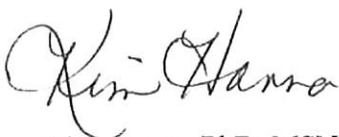
Initially, participating faculty, staff and nursing students will be trained and certified in the Music and Memory program. They will then train and certify nursing home staff and assist with the on-site implementation of the program. Both formative and summative evaluation measures will be implemented over the life of the project to determine impact. Results of the project will be disseminated to all stakeholders throughout the Upper Cumberland and to the nursing home community at large.

The Music and Memory program is an exciting opportunity for nursing home residents and their families. If time permits, please review the documentary called "Alive Inside" that culminated from this program as you see residents literally become alive inside from the effects of the personalized music ([www.aliveinside.us/#land](http://www.aliveinside.us/#land)). This grant would allow us to be able to intervene with Alzheimer's and dementia residents of multiple nursing homes in the Upper Cumberland to improve the quality of their lives and make a difference in their families.

My colleagues and I are passionate about the care of patients with dementia, which affects 47.5 million people worldwide (Alzheimer's Association, 2016). Tennessee, as well as the nation, is gripped by Alzheimer's disease, which is the 6<sup>th</sup> leading cause of death (Alzheimer's Association, 2016).

We would like to thank you for the opportunity to apply for a grant that could help nursing home residents and have a dramatic impact on not only patients but families and caregivers in the Upper Cumberland region.

Warm regards,



Kim Hanna, PhD, MSN, CNL, Associate Professor  
MSN Coordinator, TN eCampus,  
Whitson-Hester School of Nursing  
Tennessee Technological University

## EXPECTED OUTCOMES

### **Project Abstract**

The project, **“Improvement of Quality of Life for Nursing Home Residents through the ‘Music & Memory’ Program,”** intends to provide personalized music through the use of Ipods to residents of nursing homes. With Alzheimer’s and dementia impacting a large proportion of residents in the United States and in TN nursing homes, a resident-centered Music and Memory program will be implemented to improve the quality of care in multiple nursing homes in the Upper Cumberland area of Tennessee. Through procurement of this grant, the Whitson-Hester School of Nursing (WHSON) will provide funds for program certification, renewal for an additional five years, supplies, labor, and manpower for the nursing homes to become certified in the Music & Memory program (Music and Memory, Inc., 2016). To measure the effectiveness of this program, this grant will use evidence-based practice to measure cognitive and psychosocial functioning as well as positive physical demeanor of Alzheimer’s and dementia patients as observed by their nursing home caregivers. Staff and nursing students’ attitudes and satisfaction will also be evaluated pre- and post-intervention. In addition, the number of antipsychotic medications prescribed for patients pre-, during, and at end of the grant period will also be monitored to see if the number of these type drugs and frequency of use during and after the intervention of the Music and Memory program are reduced.

The goals/objectives (with measures and statistical analyses) of the researchers will be to:

1. Improve the physical, cognitive, and emotional functioning of Alzheimer’s patients—thereby addressing “Improve quality of life and care of residents through person-centered care” (CMPQI Grant Focus Areas); Measures: Observations by caregivers. Statistical Analyses: Descriptive statistics and Paired samples *t* tests
2. Reduce the number and frequency of uptake of antipsychotic medications prescribed for patients pre-, during, and at end of grant period—thereby addressing “Reduction of unnecessary antipsychotic medication use among nursing home residents”(CMPQI Grant Focus Areas); Measures: Number of antipsychotic medications prescribed for patients pre-, during, and at end of grant period. Statistical Analyses: Descriptive statistics; repeated measures analysis of variance
3. Assess nursing staff and nursing students’ attitudes pre- and post-intervention of Music and Memory to assess the focus area “Implementation of culture change initiatives that go beyond regulatory requirements to improve quality of care and life” (CMPQI Grant Focus Areas); Measures: Nursing staff and nursing students’ attitudes, Staff and student satisfaction of the Music and Memory program. Statistical Analyses: Descriptive statistics and Paired samples *t* tests

Kim Hanna, Ph.D., MSN, CNL, Associate Professor and MSN Coordinator for the WHSON at Tennessee Technological University (TTU), Cookeville, TN, is the requester/primary investigator that will be accountable for the project. Dr. Hanna has been a nurse for 33 years with 27 years spent in academia. She has published and has experience with multiple grants. In addition to her professional interest in this project, she has a personal passion for music as a singer and songwriter. George Chitiyo, Ph.D., will serve as the program evaluator. Several evaluation methods will be completed by the caregivers/staff, students, and faculty who volunteer and provide informed consent prior to the implementation of the Music and Memory program and post program implementation.

## **Statement of Need**

Alzheimer's disease is the 6<sup>th</sup> leading cause of death in the United States and in the state of Tennessee, with more than 5 million sufferers nationwide (Alzheimer's Association, 2016a) where 110,000 people 65 and older have the disease. Of the 10 leading causes of death in the U.S., Alzheimer's is the only one that cannot be slowed down, prevented or cured (Alzheimer's Association, 2016a). Alzheimer's disease is a type of dementia. In 2015, data showed that 47.5 million people worldwide had dementia (WHO, 2015). The World Health Organization (WHO) considers dementia to be a public health priority in which investments should be made in health and social systems to expand and enhance care and services for individuals living with dementia and for those providing care for them (WHO, 2015). The toll on family and care providers of these patients occurs in the realms of emotional, mental, and physical costs. The toll to patients comes in the isolation and imprisonment they feel in their own minds and bodies. Loss of memory and recognition is a burdensome facet of this disease.

This project will use the Music and Memory (2016) program in an interdisciplinary approach to help patients feel "alive inside" and interact more with family and care providers. At present, only 33 care facilities in the state of Tennessee are certified, with only one agency certified in Putnam County. Replication within the state could extend hope and enhance quality of life for a large number of citizens and their families and impact nursing students. As nursing is a holistic, multidimensional profession addressing emotional, psychological, social, and physical needs of patients, this project provides an opportunity to transition students from theoretical learning to real workforce issues. These students are within months of graduation and will autonomously work with these patients and their families by providing an intervention that offers patients hope and insight into their care. Students participating in this project will emerge as leaders, serving as mentors to unlicensed personnel in the health care arena.

Potential problems that may be encountered include operational problems, negative resident response to treatment, unmotivated caregivers, and difficulty determining preferred music. A contingency plan will include: (1) Meeting with the administrators of the nursing home that is currently certified by the Music and Memory program in Cookeville, TN, to assess strengths, challenges, areas for improvement, potential or actual problems, and any solutions to these problems. (2) Ceasing the intervention if the patient becomes agitated, irritated, or unresponsive at the intervention or caregiver during the activity. The patient will then be re-evaluated by nursing home staff/ administration. (3) Allowing caregivers who become unmotivated and unwilling to continue participation to be able to stop using the Music and Memory program since this is a voluntary program for the caregiver, patient, and/or family. (4) Assessing preferred music in conjunction and collaboration with the caregiver and the family. (5) Establish a team at each nursing home that will be made up of a nursing faculty member and small group of senior nursing students who will meet periodically to discuss challenges as well as successes of the program. This team will collaborate with nursing home staff and administration to make this experience as seamless as possible for both the patient, caregivers/staff/administration of the nursing home, and family.

## **Program Description**

In 2008, social worker Dan Cohen introduced customized familiar music via an iPod to geriatric patients experiencing Alzheimer's and dementia. Cohen references more than 30 research studies that have contributed to the development of his program. His evidence-based strategies exemplify an innovative approach that has been captured on video demonstrating the patients'

increased ability to communicate and interact verbally and nonverbally with family members and health care staff following the intervention of music. Outcomes of Cohen’s program have been reported in surveys of professional staff using the program. A 2012 survey indicated that 71 percent perceived that the program helped patients with anxiety, 74 percent believed music assisted professionals with care provision, and 94 percent would recommend the program to other facilities. Cohen was able to create “Music & Memory” in 2010 in an effort to train others to implement these programs in the U.S. and Canada. A documentary called “Alive Inside: a Story of Music and Memory” was released about this program in 2012 (Music and Memory, Inc., 2016).

The project proposed here will be implemented in five facilities in the Upper Cumberland region of Tennessee. An additional facility that has already begun the process of certification but needs manpower and equipment will be included in the funding and equipment distribution. The start-up cost/renewal and/or renewal/additional equipment for each agency will be provided by this grant. Training is included in the start-up cost for the agencies’ staff as well as for the nursing students, other students, faculty, and other volunteers. The majority of the nursing students targeted for implementation of this program are Senior students in their last semester of nursing school (Senior 2 Students). In addition, the training will include three 90-minute live webinars, integration of digital music into the patients’ plans of care, and a way to evaluate the effectiveness of the program (Music and Memory, n.d.a). In addition to the cost of the certification/ renewal fees, and program start-up, the funds from this grant will provide iPod shuffles, a computer in each of the facilities specific for the needs of the project (music library), and other limited supplies (see Budget) that will remain with the designated facility after the conclusion of the project so that the project will be successfully sustainable. For those nursing homes that have begun certification, renewal fees for five years and additional equipment will be provided to ensure program sustainability. Senior 2 Nursing students in their Leadership and Management or their Community Health clinical rotations and the healthcare and/or nursing team will be able to implement the Music and Memory activities with the patients and document the behaviors. The Senior 2 students will be involved in the management of the program start-up, teaching as needed, personally implementing the programs, and may also be involved in assisting non-license personnel and other nursing students at various educational levels to implement the projects with the patients. Indirect implementation/set-up of the program can also be done with other interdisciplinary college students from departments such as Music and Sociology as well as through community volunteers.

To implement this proposal in a timely and efficient manner with a quality outcome, the initial emphasis (November-December 2016) will be on equipment purchase, networking, student recruitment, and training. Certification and training will be the focus from November 2016 through March 2017. Implementation of the project with the students and facilities will be the focus for February-April 2017. Data collection could begin as early as January 2017 with pre-intervention assessments and formative assessments throughout the Spring and Summer 2017 with summative assessments and synthesis scheduled for Fall 2017. Focus on sustainability will be from Summer-Fall 2017.

**Table 1: Timeline for Implementation.**

<b>DATES</b>	<b>EMPHASIS</b>	<b>BENCHMARKS</b>	<b>DELIVERABLES</b>
Nov 15 – Dec 2016	IRB Approval prior to Implementation of Project Begin planning for purchasing supplies, networking, recruiting students, begin	IRB Approval	

	<p>planning with agencies for training scheduling, etc.  *Existing Nursing Home (NH) certified in Music and Memory: Meeting with the agency to assess strengths, challenges, and potential contingency plans to avert any issues that the agency encountered upon their initial and on-going implementation of the program.</p> <p>*Existing NH certified in Music and Memory: Needs assessment: Begin planning for supplies purchase, networking, recruiting students, needs assessment of the agency</p>	<p>*Complete assessment of their program implementation</p> <p>*Complete Needs assessment</p>	<p>*Assessment of Program Implementation</p> <p>*Needs Assessment</p>
Nov. 2016- Mar. 2017	<p>Certification Training/ Supplies Preparation, and Initial set-up for program at agency</p> <p>*N/A for the Existing NH certified in Music and Memory</p>	<p>Researchers/Students/ NH Staff Training on Music &amp; Memory Completion (via Webinar, etc.)  NH Staff Training on Observations for Survey(s)  Completion by Researchers and/or Students</p> <p>Supplies (Computer, iPods, Music Uploads) Preparation Complete for Each Agency by Co-PI Technology Specialist</p>	
Jan. 2017	<p>Begin Pre-Intervention Assessments  *N/A for the Existing NH certified in Music and Memory</p>		
Jan. – Apr. 2017	<p>Implementation of Program—Staggered implementation of program based on certification training of agency</p> <p>Data Collection of Formative Assessments  *N/A for the Existing NH certified in Music and Memory</p>	<p>Data Collection of Formative Assessments in Progress</p>	
May – July 2017	<p>Continuance of Program and Data Collection of Formative Assessments</p> <p>*Existing NH certified in Music and Memory: Satisfaction Survey of Staff Attitudes toward the Music and Memory Program Only</p>	<p>Data Collection of Formative Assessments in Progress</p>	
Aug. – Sept. 2017	<p>Summative Data Collection and Data Analysis</p> <p>*Existing NH certified in Music and Memory: Satisfaction Survey of Staff Attitudes toward the Music and Memory Program Only</p>	<p>Data Collection of Summative Assessments in Progress</p>	
Oct. – Nov. 2017	<p>Completion of Data Analysis</p>	<p>Completion of Data Collection;  Statistical Analysis Completed by Co-PI Statistician</p>	<p>Statistical Analysis Completed by Co-PI Statistician</p>

Nov. 2017	Dissemination of Results to Community		Results Disseminated at End of Project Event
Nov. 19, 2017	Report at the conclusion of the project to CMS and the State Agency. (5 days after project end)	Report to CMS and State Agency	Report to CMS and State Agency
May 14, 2018	Report monitoring the success of the project to CMS and State Agency (6 months after project end)		Submitted Manuscript; Submitted Abstract for Conference Presentation

\*\*Quarterly Progress Reports submitted to CMS and the State Agency.

Sustainability of the projects in these facilities will be based on provision of renewal funds for five years and allowing the start-up supplies to remain in the agencies at the end of the grant. Each team will focus on assisting each nursing home to develop a plan for volunteer funding from the community through churches, local donations, etc. Adding additional supplies for expansion of the program and replacing worn out supplies will be the challenge to sustainability. Collaboration with interdisciplinary departments at TTU, such as Marketing and Business, will help empower the facilities to promote the ongoing need for the project, expansion, and sustainability in the future.

**RESULTS MEASUREMENT:**

**Performance Measurement and Program Evaluation**

Table 2 shows the CMPQI Grant Focus Area addressed by each objective, the measure to be used, the data collection instrument, and when the data will be collected.

<b>Table 2: Assessment and Evaluation Plan</b>				
<b>CMPQI Grant Focus Areas</b>	<b>Measure</b>	<b>Data Collection Instrument</b>	<b>When Data will be Collected</b>	<b>Statistical Analyses</b>
Improve quality of life and care of residents through person-centered care	Physical, cognitive, and emotional functioning of patients as observed by caregivers	1. Multidimensional Observation Scale for Elderly Subjects (MOSES) 2. Positive Physical Demeanor Scale for caregivers	Pre-intervention and every two weeks after Music and Memory program is being implemented	Descriptive statistics (frequency tables, crosstabulations, graphs); Paired samples t tests
Implementation of culture change initiatives that go beyond regulatory requirements to improve quality of care and life	1. Nursing staff and nursing students' attitudes 2. Staff and student satisfaction of the Music and Memory program	1. Kemper et al. (2004) questionnaire (modified) 2. Survey designed by the researchers or the developers of the Music and Memory program	1. Pre- and post-intervention of Music and Memory 2. Administered at the end of the intervention period	Descriptive statistics (frequency tables, crosstabulations, graphs); Paired samples t tests
Reduction of unnecessary antipsychotic medication use among nursing home residents	Number of antipsychotic medications prescribed for patients pre-, during, and at end of grant period		Collect monthly data on the number of medications and frequency of use	Descriptive statistics; repeated measures analysis of variance

As shown in Table 2, three focus areas will be addressed by this project. The measures associated with the first focus area will be assessed using the Multidimensional Observation Scale for Elderly Subjects (MOSES) (Helmes, Csapo, and Short, 1987) and a Positive Physical Demeanor Scale for caregivers that will be developed by the PI/Co-PIs of this project and administered by healthcare staff every two weeks. For the second focus area, the modified Kemper, Martin, Block, Shoaf, & Woods (2004) instrument will be used to collect data regarding health-care staff attitudes. Another instrument will be designed to assess the staff and nursing students' satisfaction with the Music and Memory program. The Kemper instrument will be administered at the start and end of the intervention period while the one assessing satisfaction will be administered only at the end. Lastly, existing data on antipsychotic medication will be compiled and analyzed to determine the extent to which the Music and Memory program reduces the number and frequency of medications taken.

Staff of the nursing homes that are targeted in this project will be trained according to the Music and Memory program. The staff will have a method to articulate and share their knowledge, successes, and/or challenges with the debriefing team in their facility, among all the five nursing home participants at a meeting/conference at formative and/or summative points in the project timeline, and with other staff to provide information on the improvement of resident outcomes. Quarterly reports shall be submitted to the CMS and the State Agency during the project timeline by Kim Hanna, PI, with the assistance from George Chitiyo, Co-PI and statistician for the project.

### **BENEFITS TO NURSING HOME RESIDENTS**

#### **Improving Quality of Life and Care**

Music & Memory's research and evaluation in the organizations implementing the program provide consistent results: "Participants are happy and more social"; "Relationships among staff, participants, and family deepens"; "Everyone benefits from a calmer, more supportive social environment"; "Staff regain more valuable time previously lost to behavior management issues"; and "There is growing evidence that a personalized music program gives professionals one more tool in their effort to reduce reliance on anti-psychotic medications" (Music and Memory, n.d.b, para 7).

Dementia and Alzheimer's patients exhibit a variety of symptoms that can affect their quality of life. Agitation behaviors are some aspects that lead to safety concerns. Preferred music has been used to mask unpleasant stimuli that cause agitation in patients and has significantly impacted agitation reduction by promoting positive soothing effects in elderly patients with dementia in long-term care facilities (Cuddy and Duffin, 2005; Sung, Chang, Abbey, and 2006). Decreasing agitation in the patients in a nonpharmacological manner allows the resident to be more awake, decreasing the number of antipsychotics, and reducing polypharmacy effects.

Impaired ability to receive and express language is another concern for these residents. Susuki, Kanamori, and Watanabe (2003) report cases of nonverbal residents with dementia and aggressive behaviors talking coherently during the music session and aggressive behaviors diminishing at other times throughout the day. This intervention can improve residents' quality of life through the ability to express their basic needs to caregivers.

### **CONSUMER/STAKEHOLDER INVOLVEMENT**

#### **Nursing Home Community**

The nursing home community for this project will be those five nursing homes that will seek initial Music and Memory certification as well as the one nursing home in the Upper Cumberland

that already has the certification but needs sustainability assistance (see attached letters of commitment). The direct care staff of each of the nursing homes will be involved in the development and implantation of the project in the following ways:

1. Attend training through the Music and Memory Certification Program
2. Volunteer to complete the following forms at various intervals (pre-, during, and post-implementation): Multidimensional Observation Scale for Elderly Subjects (MOSES); Positive Physical Demeanor Scale for caregivers; Kemper et al. (2004) questionnaire (modified); Survey designed by the researchers/developers of the Music and Memory program
3. Implement the actual Music and Memory program with the NH residents
4. Collect monthly data on the number of antipsychotic medications and frequency of use

The NH administration will commit to:

1. Supporting the development and implementation of this as a priority project and will seek ways to assist the staff in the success of the project.
2. Assisting and incentivizing the staff as needed.

## **FUNDING**

### **Financial Feasibility and Sustainability**

The specific amount of CMP funds to be used for the project is budgeted at \$165,951. The grant budget will be used beginning November 15, 2016 and ending November 14, 2017. Salaries (with exemption of benefits) for the grant personnel will be \$49,909. This includes the cost of eight members of the grant personnel who are facilitating the implementation of the Music and Memory program. (See spreadsheet attachments for allocations for each grant member). Non-CMP funds include the required benefit costs totaling \$12,513 for the grant personnel. As indicated in the request for proposal, these benefits will be covered by Tennessee Tech University (TTU).

The Music and Memory program consists of music played on iPods and available to most patients in the nursing home facilities. The required supplies have a total cost of \$85,046 and consists of iPod Shuffles, chargers, headsets, computer for each site to manage iPods and song lists. There is funding listed to facilitate purchasing music for each facility that can support customized playlists for each patient. In addition to the supplies, the plan to collaborate deals with having two meetings at TTU with the nursing homes involved as well as travel to the facilities to setup, monitor, and evaluate the program. The dissemination of research data and findings will occur at an end of the project conference with attendees from the area.

In order to become Certified Music and Memory Organizations, the budget included \$12,000 to certify, train, and provide a five year renewal fee to the nursing home facilities and TTU. Due to the initial certification training, inclusion of an additional five year renewal with the Music and Memory program, foundational supplies and set-up, and collaboration with the WHSON, sustainability of each organization will have been strengthened and they will be able to cover basic operating expenses of their Music and Memory program.

## **INVOLVED ORGANIZATIONS**

### **Organizations and Partnerships**

A needs assessment was completed in order to determine the desire for/commitment to the program, number of potential residents and/or average census, and estimated number of patients with Alzheimer's and dementia. The six nursing homes listed in Table 3 will receive funds.

<b>Table 3: Needs Assessment for CMPQI Grant.</b>		
<b>Nursing Home/ Contact Information</b>	<b>Residents/ Beds per Facility*</b>	<b>Residents in Designated Alzheimer and Dementia Units/or Estimated Number of Patients</b>
<b>Overton County Nursing Home</b> 318 Bilbrey Street, Livingston, TN 38570-1796 <b>Debbie Carmack</b> , (931) 823-6403   (931) 823-7836, fax dcarmackocnh@hotmail.com	91/125	No designated unit—63 residents with Diagnosis of Alzheimer’s/Dementia
<b>NHC HealthCare Cookeville</b> 815 South Walnut Ave, Cookeville, TN 38501 <b>Administrator Jeremy Stoner, NHA</b> (931) 528-5516   (931) 528-8151, fax klittle@nhccookeville.com	94/94	No designated unit—About 50% of population has signs/symptoms of dementia of some form
<b>Bethesda Health Care Center</b> 444 One Eleven Place, Cookeville, TN 38506 <b>Tamara Brown</b> , (931) 525-6655   bhcnursing@thmgt.com	106/120	No designated unit -About 50% of patients diagnosed with Alzheimer’s/Dementia
<b>Life Care Center of Sparta</b> 508 Mose Drive, Sparta, TN 38583 <b>Stacy Demps, DON</b>   Stacey_demps2@lcca.com (931) 738-9430, ext. 121   (931) 738-9411, fax	71/100	No designated unit -30 patients with Alzheimer’s/Dementia
<b>Life Care Center</b> 80 Justice Street, Crossville, TN 38555 <b>Executive Director Cathy Howe</b> (931) 484-4742   (931) 456-0309, fax Amber_bray@lcca.com	115/122	No designated unit -Around 40-50 diagnosed with Dementia
<b>Signature Healthcare of Putnam County</b> <b>*Existing Certified in Music &amp; Memory</b> 278 Dry Valley Rd, Cookeville, TN 38506 Ruthie Birdwell, DON don.cookeville@signaturehealthcarellc.com (931) 537-6524   (931) 247-9292 (cell)	153/169	Has a designated unit “Serenity unit” with 37 residents (locked 40 bed unit) -About 75% of patients with Alzheimer’s/Dementia

There are no additional sub-contractors that are expected to carry out and be responsible for components of the project. Each agency will have a clinical contract with the WHSON prior to implementation of the project. Copies of contracts will be available upon request to CMS and the State.

**INNOVATION AND REPLICABILITY**

The Music and Memory program has been researched and shown to be effective in Alzheimer’s and dementia patients by providing pleasure, “increasing cooperation/attention, reduces resistance to care”, decreasing sundowning and agitation, “enhancing engagement and socialization, fostering a calmer environment”, and “providing a valuable tool for efforts to reduce reliance on anti-psychotic and anti-anxiety medications” (Music and Memory, n.d.a, para 4).

The WHSON will share and disseminate results of the project to other NHs, the TTU community, and communities of interest through the End of the Project Event. In addition to quarterly reports, reports will also be sent to CMS and State Agency at the conclusion of project in 11/19/17 and 5/14/18. Manuscripts will be submitted to journals, and abstracts will be submitted to local, state, national or international conferences for presentations.

### **JOB DESCRIPTIONS FOR KEY PERSONNEL**

**PI-Kim Hanna:** Coordinator of project; Oversee faculty/student team(s) to assist in training, implementation, data collection, and sustainability for Music and Memory program in NH; Report writing.

**Co-PIs, Faculty Team:** (Shelia Hurley, Ann Hellman, Barbara Jared, Emily Lee, Toni Roberts) Serve as oversight of student team(s) to assist in training, implementation, data collection, and sustainability for Music and Memory program in NH.

**Co-PI, IT-Jason Hurley:** Planning and set-up of supplies for program; Supervise students assisting with set-up.

**Co-PI-George Chitiyo:** Statistician, Program Evaluator: Statistical Analysis of Data, Report Writing.

### **BIOGRAPHICAL SKETCHES FOR KEY PERSONNEL**

**Kimberly Hanna, Ph.D., MSN, CNL** is currently an Associate Professor and MSN Coordinator at WHSON, TTU, Cookeville, TN, with over 27 years' experience at the University. Past positions include Perinatal Parent Education Director and Staff Nurse, Vanderbilt University Medical Center. Recent honors include: "Most Encouraging Faculty," Tech Togetherness Award, 2016; Anne Floyd Koci Faculty Award for Excellence in Research, 2015; and Excellence in Service, 2013. Recent peer-reviewed publications include: Hurley, S. & Hanna, K. (2016) Peer Interviewing. *Nurse Educator*, Manuscript In Press; Hanna, K., Duvall, J., Turpin, R. Pendleton-Romig, K. & Parker, S. (2016). Mastering the Journey to Continuous Compliance: Process Improvements for Excelling at CCNE Accreditation *Sage Open Access*, June/July, 2016; Hanna, K., Roberts, T., & Hurley, S. (2016). Collaborative Testing as NCLEX-RN Enrichment. *Nurse Educator*, 41, 4, July/August, 2016; McQuiston, L. & Hanna K. (2015). Peer coaching: An overlooked resource. *Nurse Educator*, 40, 2, March/April 2015. Grants include: Fostering Creative Inquiry for the Transition into the Baccalaureate Nursing Profession thru Use and Application of IHI Safety Modules into Nursing 4450, Nursing Leadership and Management for RN-BSN Students, QEP Grant (\$5,000), TTU. PI: Hanna, K. Co-PI: Hurley, S., 2016; Incivility in Nursing, QEP Grant (\$4,700), TTU, P.I.: Kim Hanna, Co-PIs: Toni Roberts, Shelia Hurley, Rebecca Turpin, and Susan Clark, Awarded for Spring 2015; Collaborative Testing, QEP Grant (\$5,000), TTU. PIs: Kim Hanna, Darlene Franklin, Shelia Hurley, and Toni Roberts, Awarded for Spring 2014.

**Ann Hellman, Ph.D., MSN, RN**, is an Assistant Professor at TTU, WHSON. She received her Ph.D. from East Tennessee State University in 2016. Her dissertation was a phenomenological study of female sexual assault recovery and the role that spiritual beliefs and religious practices have on the recovery process. She also actively researches nursing education and student learning. She has received over \$15,000 in institutional grants, has had seven publications in national and international journals, and had seven regional presentations. Ann is active in multiple community events and serves on the Board of Directors for two community non-profit agencies. One agency serves victims of domestic and sexual violence and the second provides a spiritual ministry to area caregivers.

**Shelia Hurley, PhD, RN, MSN;** Assistant Professor, TTU, WHSON, Cookeville, Tennessee. Shelia has been teaching for six years and received her Ph.D. in Dec 2015. Her dissertation focused on the nurses' perception of self as a role model and their own health practices. She has five

publications and five grant activities related to student activities and teaching and was awarded the Anne Floyd Koci Faculty Award for Excellence in Research (2016).

**Barbara, Jared, MSN WHNP-BC, RN** is an Assistant Professor of Nursing at TTU, WHSON. She received her Master's and Post-Masters from the University of Tennessee and is a PhD candidate at East Tennessee State University. Her area of research interest is in health literacy and women's health issues of all ages. Barbara provides service to the university and chairs the university Academic Council and committees within the school of nursing. She is actively involved in community service with a history of service as an elected member of a local Board of Education where she served as Chair for 14 years. She maintains a clinical practice in women's health in a public health setting.

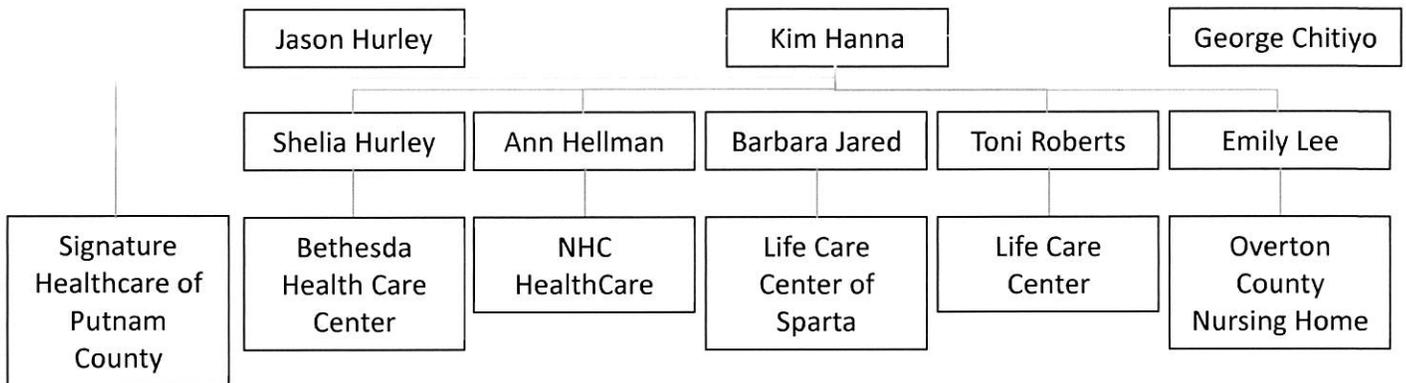
**Emily Lee, DNP, APRN, FNP-C, CLC**, is an Assistant Professor at TTU, WHSON. Dr. Lee also practices as a Family Nurse Practitioner in the community. She recently completed her Doctor of Nursing Practice (DNP) degree in 2015, and her DNP project focused on increasing breastfeeding knowledge and confidence in healthcare providers. She was awarded Sigma Theta Tau International's Rising Star of Nursing Research award in November 2015 and became a certified lactation counselor during her doctoral studies as well. Emily had a recent publication titled, "Breastfeeding Knowledge and Intent to Breastfeed: An integrative Review," published in *Clinical Lactation* in June 2016.

**Toni Roberts, DNP, RN, CHSE**, is a lecturer at TTU, WHSON. Dr. Roberts has 33 years of experience as a registered nurse. She completed her DNP at Samford University in 2016. Areas of research interest include collaborative testing, peer mentoring, and civility in nursing. She is also involved in an initiative to create a caregiving center at Tennessee Tech. She has a specialty certification in simulation education, and her DNP project focused on simulation to improve newly licensed nurse retention. Working with colleagues, she has received two grants, total \$9700, and was published in *Nurse Educator* in July 2016: *Collaborative testing as NCLEX enrichment*. She has a personal passion to improve quality of life for patients living with dementia.

**George Chitiyo, Ph.D.**, is an Associate Professor of Educational Research at TTU. Dr. Chitiyo has also served as Research Officer, Biomedical Research and Training Institute and Monitoring and Evaluation Officer, Catholic Relief Services in Harare, Zimbabwe. He has expertise in research design and statistical analysis as well as evaluation methodology and has conducted evaluation activities on both funded and nonfunded projects in K-12 and university settings. His numerous publications include works related to the evaluation of educational interventions in both educational and noneducational settings with his most recent being Taukeni, S., Chitiyo, G., Chitiyo, M., Asino, I., & Shipena, G. (2016). Assessing post-traumatic stress disorder among school-going children affected by the 2011 floods in northern Namibia. *Jàmá: Journal of Disaster Risk Studies*; and Educating Zimbabwe for the 21<sup>st</sup> century: What every educator needs to know. (2014). Nova Science Publishers: With Chitiyo, M., Charema, J., Rumano, M., & Chitiyo, J. He has served in roles such as PI as well as senior personnel in various grants totaling over \$1.2 million with an additional \$500,000 research support pending. He has had the honor to develop assessment tools in various synergistic activities.

**Jason Hurley, MA, BS**, is the Director of Clinical Simulation and Professional Health Development at WHSON, TTU. Previously, he was a Systems Administrator at Y-12 in Oak Ridge, TN where he assisted in writing multiple proposals based on training needs assessment conducted for recommending solutions to training gaps with successful funding in excess of two million dollars. He holds a Bachelor in Computer Science and a Master's in Business and Organization Security Management.

## PROJECT ORGANIZATIONAL CHART



### **References:**

Alzheimer's Association (2016a). 2016 Alzheimer's disease facts and figures. Retrieved from <http://www.alz.org/facts/>

Cuddy, L.L., & Duffin, J. (2005). Music, Memory and Alzheimer's Disease: Is Music Recognition Spared in Dementia and How Can It Be Assessed? *Medical Hypotheses*, 64, 229-235.

Helmes, E., Csapo, K. G., and Short, J., (1987). Standardization and Validation of the multidimensional observation scale for elderly subjects (MOSES). *Journal of Gerontology*, 42(40), 395-495.

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Music and Memory, Inc. (2016). Music and memory. Retrieved from <http://musicandmemory.org/about/mission-and-vision/>

Sung, H., Chang, A., & Abbey, J. (2006). The Effects of Preferred Music on Agitation of Older People with Dementia in Taiwan. *International Journal of Geriatric Psychiatry*, 21, 999-1000.

Suzuki, M. et al. (2003). Behavioral and Endocrinological Evaluation of Music Therapy for Elderly Patients with Dementia. *Nursing and Health Sciences*, 6, 11-18.

World Health Organization (2015). 10 facts on dementia. Retrieved from <http://www.who.int/features/factfiles/dementia/en/>

Date of Application:  /  /   
MM DD YYYY

# REQUEST

## PART I: Background Information

Name of the Organization:

Address Line 1:  Address Line 2:

City, County, State, Zip Code:  Tax Identification Number:

CMS Certification Number, if applicable:   -     Medicaid Provider Number, if applicable:   -

Name of the Project Leader:

Address:  City, County, State, Zip Code:

Internet E-mail Address:  Telephone Number:    -    -

Have other funding sources been applied for and/or granted for this proposal? Yes  No

If yes, please explain/identify sources and amount.

## Part III: Project Category

Please place an "X" by the project category for which you are seeking CMP funding.

Direct Improvement to Quality of Care  Resident or Family Councils  Culture Change/Quality of Life

Consumer Information  Transition Preparation  Training

Resident Transition Due to Facility Closure or Downsizing  Other: Please specify

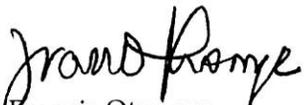
## Part IV: Funding Category

Please specify the amount and place an "X" by the funding category. Amount Requested:

\$2,500 or less  \$2,501- \$5,000  \$5,001- \$10,000  \$10,001- \$25,000  \$25,001- \$50,000  Over \$50,000

## Part V: Proposed Period of Support

From:  /  /  (e.g. 06/01/2010) To:  /  /  (e.g. 12/01/2010)  
MM DD YYYY MM DD YYYY

  
Francis Otuonye  
Associate Vice President for Research

**ATTACHMENT 2**  
**GRANT BUDGET**  
(BUDGET PAGE 1)

ADDITIONAL IDENTIFICATION INFORMATION AS NECESSARY				
APPLICABLE PERIOD: The grant budget line-item amounts below shall be applicable only to expense incurred during the period beginning 11/15/2016, and ending 11/14/2017.				
POLICY 03 Object Line-item Reference	EXPENSE OBJECT LINE-ITEM CATEGORY <sup>1</sup> (detail schedule(s) attached as applicable)	GRANT CONTRACT	GRANTEE PARTICIPATION	TOTAL PROJECT
1	Salaries <sup>2</sup>	\$49,908.08	\$0.00	\$49,908.08
2	Benefits & Taxes	\$0.00	\$12,513.40	\$12,513.40
4, 15	Professional Fee/ Grant & Award <sup>2</sup>	\$0.00	\$0.00	\$0.00
5	Supplies	\$85,045.90	\$0.00	\$85,045.90
6	Telephone	\$0.00	\$0.00	\$0.00
7	Postage & Shipping	\$200.00	\$0.00	\$200.00
8	Occupancy	\$0.00	\$0.00	\$0.00
9	Equipment Rental & Maintenance	\$0.00	\$0.00	\$0.00
10	Printing & Publications	\$1,000.00	\$0.00	\$1,000.00
11, 12	Travel/ Conferences & Meetings <sup>2</sup>	\$2,710.54	\$0.00	\$2,710.54
13	Interest <sup>2</sup>	\$0.00	\$0.00	\$0.00
14	Insurance	\$0.00	\$0.00	\$0.00
16	Specific Assistance To Individuals <sup>2</sup>	\$0.00	\$0.00	\$0.00
17	Depreciation <sup>2</sup>	\$0.00	\$0.00	\$0.00
18	Other Non-Personnel <sup>2</sup>	\$12,000.00	\$0.00	\$12,000.00
20	Capital Purchase <sup>2</sup>	\$0.00	\$0.00	\$0.00
22	Indirect Cost (% and method)	\$15,086.45	\$0.00	\$15,086.45
24	In-Kind Expense	\$0.00	\$0.00	\$0.00
25	<b>GRAND TOTAL</b>	<b>\$165,950.97</b>	<b>\$12,513.40</b>	<b>\$178,464.37</b>

<sup>1</sup> Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, Uniform Reporting Requirements and Cost Allocation Plans for Subrecipients of Federal and State Grant Monies, Appendix A. (posted on the Internet at: <https://www.tn.gov/assets/entities/finance/attachments/policy3.pdf>).

<sup>2</sup> Applicable detail follows this page if line-item is funded.

**ATTACHMENT 2 (continued)**  
**GRANT BUDGET LINE-ITEM DETAIL**  
(BUDGET PAGE 2)

**APPLICABLE PERIOD:** The grant budget line-item amounts below shall be applicable only to expense incurred during the period beginning 11/15/2016, and ending 11/14/2017.

SALARIES	Rate	Hours	#Years			AMOUNT
Kimberly Hanna (PI)	49.38 x	234 x	1 +		(Longevity, if applicable)	\$11,554.92
Jason Hurley (co-PI)	29.69 x	156 x	1 +		(Longevity, if applicable)	\$4,631.64
Shelia Hurley (co-PI)	38.89 x	205 x	1 +		(Longevity, if applicable)	\$7,972.45
Ann Hellman (co-PI)	40.89 x	117 x	1 +		(Longevity, if applicable)	\$4,784.13
Emily Lee (co-PI)	36.24 x	117 x	1 +		(Longevity, if applicable)	\$4,240.08
Barbara Jared (co-PI)	45.86 x	117 x	1 +		(Longevity, if applicable)	\$5,365.62
Toni Roberts (co-PI)	31.08 x	117 x	1 +		(Longevity, if applicable)	\$3,636.36
George Chitiyo (co-PI)	43.88 x	176 x	1 +		(Longevity, if applicable)	\$7,722.88
<b>ROUNDED TOTAL</b>						<b>\$49,908.08</b>

PROFESSIONAL FEE/ GRANT & AWARD	AMOUNT
SPECIFIC, DESCRIPTIVE, DETAIL (REPEAT ROW AS NECESSARY)	\$0.00
<b>ROUNDED TOTAL</b>	<b>\$0.00</b>

TRAVEL/ CONFERENCES & MEETINGS	AMOUNT
Travel to Sparta, TN (rate=\$0.47/mile)	\$186.12
Travel to Livingston, TN (rate=\$0.47/mile)	\$187.06
Travel to Crossville, TN (rate=\$0.47/mile)	\$346.86
Bell Hall Meeting Room Rental (2)	\$50.00
Meeting Catering (2)	\$178.00
Bell Hall End of Year Conference Room Rental	\$150.00
End of Year Conference Catering	\$1,112.50
End of Year Conference Music and Memory Speaker Fee	\$500.00
<b>ROUNDED TOTAL</b>	<b>\$2,710.54</b>

INTEREST	AMOUNT
<b>ROUNDED TOTAL</b>	<b>\$0.00</b>

SPECIFIC ASSISTANCE TO INDIVIDUALS	AMOUNT
SPECIFIC, DESCRIPTIVE, DETAIL (REPEAT ROW AS NECESSARY)	\$0.00
<b>ROUNDED TOTAL</b>	<b>\$0.00</b>

DEPRECIATION	AMOUNT
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SPECIFIC, DESCRIPTIVE, DETAIL (REPEAT ROW AS NECESSARY)	\$0.00
ROUNDED TOTAL	\$0.00

OTHER NON-PERSONNEL	AMOUNT
Certification fees for Music and Memory program	\$12,000.00
ROUNDED TOTAL	\$12,000.00

CAPITAL PURCHASE	AMOUNT
SPECIFIC, DESCRIPTIVE, DETAIL (REPEAT ROW AS NECESSARY)	\$0.00
ROUNDED TOTAL	\$0.00

August 18, 2016

The Nursing Home Civil Monetary Penalty Quality Improvement (CMPI) Program  
Implementation Funding Opportunity

ATTN: Vincent Davis, State Survey Agency Director  
665 Mainstream Drive, 2<sup>nd</sup> Floor, Nashville, TN

Dear Mr. Davis,

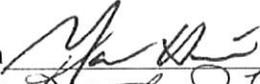
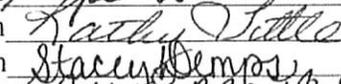
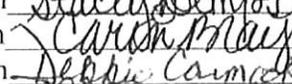
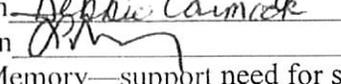
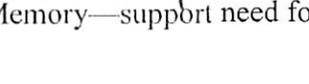
In representation of various nursing homes in the Upper Cumberland region of Tennessee, it is our pleasure to write this letter of support for the Tennessee Tech University (TTU) Whitson-Hester School of Nursing grant application, titled **“Improvement of Quality of Life for Nursing Home Residents through the ‘Music & Memory’ Program”** to be submitted to the Nursing Home Civil Monetary Penalty Quality Improvement (CMPQI) Program Implementation Funding Opportunity for funding consideration.

**“Improvement of Quality of Life for Nursing Home Residents through the ‘Music & Memory’ Program”** will provide opportunities for our nursing home facilities to become Music & Memory Certified Care Organizations and assist to sustain the renewal of their programs financially for five additional years. Our facilities seek to provide the latest innovative care practices and this project would make this unique and novel program, “Music & Memory,” available for our patients. The development and implementation of this project will be supported by our administrations as a priority project and our direct care staff will be trained through the Music & Memory program and be responsible for the primary implementation of the project. We realize that our staff will be vital to the success of the project and we commit to assist and incentivize as needed. In addition, we look forward to the collaboration opportunities with the TTU Whitson-Hester School of Nursing (WHSON) that this program will bring as the nursing academic community assists us with the preparation, supplies set-up, manpower, and implementation of the program. WHSON student nurses will also collaborate with members of our staff to work with Dementia and Alzheimer’s patients and their families through the implementation of this program.

We understand that our staff will be asked to participate in evaluation efforts that will allow us to maintain the effectiveness of the program as well as provide evidence based practice in relation to the Music & Memory program implementation. In addition, our staff will be able to assist with the data collection for chart review related to antipsychotic medication.

In conclusion, this project will provide an exceptional opportunity for our facilities to collaborate with other community organizations and coordinate resources to benefit this patient population. Thank you for considering this application.

Sincerely,

Bethesda Health Care Center	Sign		Print	Mark Hill
NHC Health Care, Cookeville	Sign		Print	Kathy Little
Life Care Center of Sparta	Sign		Print	Stacey Demps
Life Care Center, Crossville	Sign		Print	Carin Bray
Overton County Nursing Home	Sign		Print	Debbie Carmack
*Signature Healthcare, P. C.	Sign		Print	LEE ROONEY

\*Signature is Certified in Music & Memory—support need for sustainability, supplies, assistance



Tennessee Tech  
UNIVERSITY

Whitson-Hester School of Nursing

Box 5001 • Cookeville, TN 38505-0001 • Ph 931-372-3651 • Fax 931-372-6244  
htzeng@tntech.edu • <http://www.tntech.edu/son>

August 18, 2016

Mr. Vincent Davis

State Survey Agency Director, Nursing Home Civil Monetary Penalty Quality Improvement (CMPQI)  
Program Implementation Funding Opportunity  
665 Mainstream Drive, Nashville, TN 37243

RE: Dr. Kim Hanna's grant application

Dear Mr. Davis,

It is my pleasure to write a letter of commitment/support for Dr. Kim Hanna's grant application, titled "**Improvement of Quality of Life for Nursing Home Residents through the 'Music & Memory' Program**" to be submitted to the Nursing Home Civil Monetary Penalty Quality Improvement (CMPQI) Program Implementation Funding Opportunity for funding consideration. I am honored to serve this fine School of Nursing.

***A brief history of TTU Whitson-Hester School of Nursing:***

*TTU School of Nursing was established in 1980. In 2014, school ranked as the 5th top nursing school in the country, according to CollegeAtlas.org based on affordability, academic quality, accessibility, and registered nurse licensure passing rate. The registered nurse licensure passing rate continues to be strong; in 2015, 98.25% of TTU students passed the examination, compared to the state average of 88 percent. TTU School of Nursing has been expanding and enriching its pre-licensure nursing program by adopting innovative teaching and learning methods, such as using simulation to supplement clinical learning. Students are able to master clinical skills on mannequins in the simulation lab, a safe and self-learning promoting environment, before delivering direct care to patients.*

This project will assist multiple nursing homes in the Upper Cumberland region of Tennessee to become Music & Memory Certified Care Organizations. The project team of this grant proposal is always seeking to provide the latest innovative care practices for the quality of life for patients in the Upper Cumberland as well as ways that students can integrate into the culture for the betterment of our community. These faculty researchers are passionate, competent, and vital to the success of this grant. By making "Music & Memory," available to nursing home residents, this unique approach to care by using personalized music to increase the quality of care will influence multiple lives---patient, caregiver, families, and students.

Thank you in advance for your consideration of Dr. Kim Hanna's proposal. Please let me know if you need any additional information from me.

Sincerely,

Huey-Ming Tzeng, PhD, RN, FAAN  
Dean and Professor, Whitson-Hester School of Nursing, Tennessee Tech University

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## GENERAL ASSURANCES

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*Assurance is hereby provided that:*

1. This program will be administered in accordance with all applicable statutes, regulations, program plans and applications:
  - a. The laws of the State of Tennessee;
  - b. Title VI of the federal Civil Rights Act of 1964;
  - c. The Equal Employment Opportunity Act and the regulations issued there under by the federal government;
  - d. The Americans with Disabilities Act of 1990 and the regulations issued there under by the federal government;
  - e. The condition that the submitted application was independently arrived at, without collusion, under penalty of perjury; and,
  - f. The condition that no amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Agency in connection with any grant resulting from this application.
2. Each agency receiving funds under any grant resulting from this application shall use these funds only to supplement, and not to supplant federal, state and local funds that, in the absence of such funds would otherwise be spent for activities under this section.
3. The grantee will file financial reports and claims for reimbursement in accordance with procedures prescribed by the State of Tennessee Department of Health.
4. Grantees awarded grants resulting from this application process will evaluate its program periodically to assess its progress toward achieving its goals and objectives and use its evaluation results to refine, improve and strengthen its program and to refine its goals and objectives as appropriate.
5. If applicable, the program will take place in a safe and easily accessible facility.

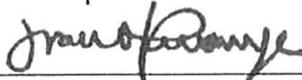
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### CERTIFICATION/SIGNATURE

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I, THE UNDERSIGNED, CERTIFY that the information contained in the application is complete and accurate to the best of my knowledge; that the necessary assurances of compliance with applicable state/federal statutes, rules and regulations will be met; and, that the indicated agency designated in this application is authorized to administer this grant.

I FURTHER CERTIFY that the assurances listed above have been satisfied and that all facts, figures and representation in this application are correct to the best of my knowledge.



Signature of Applicant Agency Administrator

8-22-2016

Date Signed (Month/Day/Year)

**Francis Otuonye, Ph.D.**  
**Associate VP for Research**