# NEA Research Labs for 2019



## University of California at San Diego

La Jolla, CA \$150,000

The University of California/San Diego, in partnership with San Diego Children's Choir and Vista Unified School District, will establish a group of studies to trace the potential effects of various musical interventions on early childhood development. The goal is to identify and relate those effects to age, status of brain development, and genetic variation.

Lab activities begin with a feasibility study with Children in Transitional Kindergarten (pre-kindergarten) classes who participate in a daily singing program. The children will be assessed on their cognitive, emotional, social, academic, and music skills. Following the feasibility study, the research will test various hypotheses about musical experiences during childhood. This lab leverages the team's deep experience in music and large-scale longitudinal child development studies, bridging such disparate fields such as cognitive and developmental psychology, neuroscience, musicology, and education. The lab also will assist the Arts Endowment in pursuing data collection and analysis within the Adolescent Brain Cognitive Development (ABCD) study, of which the agency is a sponsor.

## **Texas Tech University**

Lubbock, TX

\$146,923

As a part of its Arts Initiative in Medicine program, Texas Tech's Talkington College of Visual and Performing Arts will pair arts-based therapies with tools such as functional magnetic resonance imaging (fMRI) and techniques that measure physical changes caused by psychological states such as heart rate, changes to the skin, and eye tracking. Partners include Louise Hopkins Underwood Center for the Arts and the Museum of Texas Tech University.

The Lab's keystone study involves a team of artists, clinicians, and electronic media faculty in developing a visual arts-based app (using interactive virtual reality) as a rehabilitative tool for stroke survivors with aphasia or loss of speech. In conjunction with the app, researchers will examine changes in these patients' cognitive and emotional processing by tracking the patients' heart rate, nervous system activation, changes in the skin, and brain activity.

## University of Colorado Denver

## Aurora, CO

\$150,000

The University of Colorado Denver will develop and test a series of creative arts therapy programs designed to build resilience among critical care health professionals. The programs will use qualitative, mixed-method, and randomized controlled study designs and will integrate creative arts therapies in visual arts, music, dance/movement, and writing/poetry. The research will include focus groups of critical care providers, intensive care unit managers and hospital administrators, and national critical care leadership. Partners include Ponzio

Creative Arts Therapy Program at Children's Hospital Colorado and Lighthouse Writers Workshop. These organizations will help design experimental tasks suitable for each form of creative art therapy and will aid in recruiting participants.

#### William Marsh Rice University (Rice University)

## Houston, TX

### \$150,000

In a partnership with Musiqa, a Houston-based contemporary music ensemble, Rice University will measure the effects of music-making and music engagement on cognitive and social-emotional well-being. The lab's keystone study—a randomized, waitlist-control trial—will examine older adults with mild cognitive impairments who undergo a six-week course combining musical exposure, creation, and performance. The course will lead to an original composition performed by the study participants for family, caregivers, and members of the community. The researchers will measure intelligence, cognitive flexibility, and perceived psychological stress, among other factors before and after the intervention.

## **Drexel University**

Philadelphia, PA

#### Renewal: \$300,000

Drexel University will extend the work of an Arts Research on Chronic Stress Lab (ARCS Lab) to answer questions around arts-based interventions for socio-emotional well-being and physiological health. The studies will use mixed-method experimental designs and data sources such as standardized surveys, narratives, visual artwork, and music to identify short and long-term health outcomes.

The lab's new projects include studying visual arts therapies in pediatric cancer care settings and music therapy's effects on post-surgical pain management and opioid use. In addition, there will be studies on the outcomes of creative arts therapies for military service members with post-traumatic stress and/or traumatic brain injury. The Drexel team will consult with arts practitioners as well as sites affiliated with the Arts Endowment's Creative Forces: NEA Military Healing Arts Network.

## THIS IS LINKED TO THE PRESS RELEASE AND INCLUDED IN THE RELATED CONTENT AREA NEXT TO THE PRESS RELEASE

## Updates from NEA Research Labs awarded in FY 2017 and FY 2018

<u>Drexel University</u>'s Arts Research on Chronic Stress Lab is concluding two studies examining the impact of creative arts therapies on health and social-emotional well-being. On the lab website, the team has posted reflections on its experiences so far. It is working on several manuscripts from the first two studies while preparing for three new studies—included in this announcement as a lab extension—to launch this summer.

<u>George Mason University</u>'s MasonARC Lab is measuring the outcomes of arts education in low-income, ethnically diverse high school students and the effect of theatre training on social skills and students' sense of agency. The lab <u>website</u> is live and the team is planning a fall 2019 conference of local artists, educators, and policy-makers to discuss current findings and to pool ideas for new research on the arts and child development.

<u>Indiana University—Purdue University, Indianapolis</u> has launched a <u>website</u> for its Arts Entrepreneurship and Innovation Lab and is engaged on several new research projects, including studies of artists' role in innovation and arts- and culture-related entrepreneurship. A <u>call for papers</u> for a 2020 symposium was released in early February 2019.

<u>University of Arkansas, Fayetteville</u> has been collecting and analyzing data on fourth- and fifth-graders to examine how arts-related field trips affect students' social and emotional outcomes. The lab also hosts a <u>regular</u> blog on arts and youth development research. A recent post discusses using plain language to create and maintain school partnerships.

<u>University of California, San Francisco</u>'s Sound and Music Perception Lab is conducting studies to identify neural substrates for creativity across a range of art forms. This lab's principal activity will involve collecting and analyzing brain imaging and psychological data from genius improvisers in music, the visual arts, and comedy. The researchers have posted lab-related content to their <u>website</u>, and recently had a <u>review article</u> published by *Current Opinions in Behavioral Sciences*.

<u>University of Iowa's Rural Policy Research Institute</u> (RUPRI) The RUPRI Cultural Wealth Lab explores the intersection of rural arts and culture, entrepreneurship and innovation, and the role of cultural wealth within a Rural Wealth Creation and Distribution framework. Several new products are currently posted to its website.

<u>Vanderbilt University</u>, with Northwestern University, has designed a national survey about the arts' relationship to creative attitudes and behaviors in the general population, and is currently analyzing the data. In addition, they recently completed in-depth interviews of Nashville-based creative artists who shared insights on approaches and challenges to creating a business and a community with their art. The lab published a draft <u>literature review</u> and is working on several other manuscripts.

<u>Vanderbilt University Medical Center</u>'s Music Cognition Lab and Program for Music, Mind, and Society are conducting two studies on social-emotional development and community building through music, particularly among families of children with and without autism spectrum disorder. For more information and to learn about upcoming events, see the lab's <u>website</u>.