

### The Jonesboro Academy of Quantum Arts: An Introduction

- Presented to you by Robin S. Kuykendall
- Honors Graduate of McCluer Senior High School, Ferguson, Missouri
- Bachelor of Music, *magna cum laude*, Millikin University, Decatur, Illinois
- Master of Music, Andrews University, Berrien Springs, Michigan,
- Juris Doctor, University of Tennessee, Knoxville, *Advocate's Prize*
- Experienced K-12 classroom and vocal music teacher, private studio voice & piano instructor, adjunct postsecondary voice instructor, church choir director of all ages
- Experienced in nonprofit formation and governance
- Manager-member of Advocate & Educate, LLC, of Jonesboro, an educational advocacy and training service for parents of special needs children through age 21
- Licensed to practice law in Missouri and Tennessee, in federal courts of Eastern and Middle Districts of Tennessee, and U. S. Court of Appeals, 6<sup>th</sup> Circuit
- Civically active



### Music and the Brain

Experts are finding ...

<https://wphost-bv.soc.northwestern.edu/music/>

from NWU, Brainvolts Lab

### Music engagement positively affects brain growth

- Kraus lab discovers biological approach to **measure an individual's sound processing** with unprecedented precision.
- **The way a pre-literate child processes** the ingredients of **sound – pitch, timing and timbre – can predict future reading ability.**
- **Sound processing disadvantages can be partially offset by making music** as well as speaking another language.
- **Engagement matters.** The brains of children who were more actively involved in Kraus lab studies saw more robust changes.
- **Sound processing in the brain can be a neurological marker for issues such as autism, dyslexia and learning delays.**

<https://news.northwestern.edu/stories/2015/12/how-music-and-language-shape-the-brain>

March 26, 2019

Here in Jonesboro!

*Save the Date*

New York Institute of Technology  
College of Osteopathic Medicine  
at  
Arkansas State University  
Distinguished Medical Lecture Series  
William & Wilma Lecture  
March 26, 2019  
8:00 p.m.  
Richard Hall  
Fowler Center  
Arkansas State University Campus  
**Rhythmic Healing: Music and Medicine**

Silvia Funke, MD  
Assistant Professor of Neurology  
Johns Hopkins University  
School of Medicine



Nina Kraus, PhD  
Miguel Alvarez Chair  
Communication Sciences,  
Neurobiology and Otolaryngology  
Northwestern University

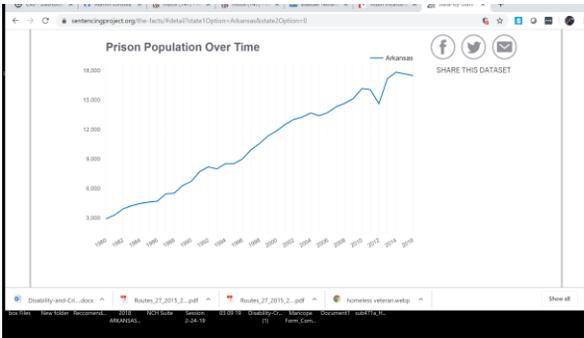


The event is free & open to the public.  
For more information, please contact:  
Annette Hillyer  
anette@nyit.edu

**Meanwhile, we continuously lose human potential in Jonesboro.**  
The problem is growing all around us.

**Arkansas, #4 in *per capita* imprisonment**

<https://www.sentencingproject.org/the-facts/#rankings?dataset-option=SIR>



High percentages of jail and prison inmates self-identify as **disabled**.  
The largest percentage of those report **cognitive disability**.

<https://www.bjs.gov/content/pub/pdf/dpji1112.pdf>

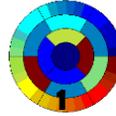
**LATENT HUMAN POTENTIAL in JONESBORO**



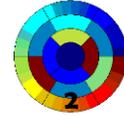
**What can we do??**

- City-private-sponsored music activities for those not presently able to engage, deliberately organized with healthy, purposeful objectives, is an
- **Intelligent, Visionary Investment** in our community's better future.
- We can create a space now.

**Two primary target groups, others could follow**



Pre-K, ages 4-5, within 1/2 mile walking distance

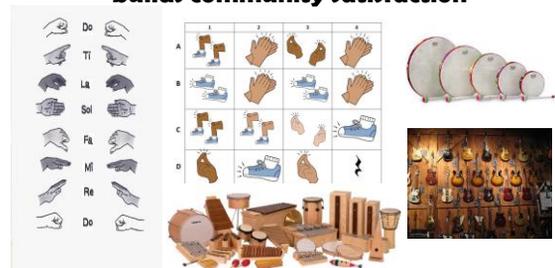


Disabled military veterans

**Deliberate Music Making Makes Us Better**

- **Pre-K music education** – Orff Schulwerk, Kodaly pitch matching, Dalcroze rhythmic movement – Provided by licensed professional educators certified in these methods
- **Pre-K mathematics education** – development of numeracy before Kindergarten – Provided by licensed Pre-K teachers
- **Music therapy** meets many currently unmet needs among disabled persons, most particularly traumatized children of poverty and other disabilities, military veterans, and persons who suffer from dementia, all prevalent in our community – Provided by persons licensed in music therapy

**Music that engages all minds builds community satisfaction**



**Specialized Teachers and Instruments Make the Difference**



### And another thing ...

**Too many impoverished children enter school unready for math. *They do not catch up.***

**Our community is thereby disadvantaged, too.**

**What can we do right now?**

## Pre-K math games and lessons, alternate with music times

Planned and presented by a licensed professional early childhood teacher

### Music, the Mathematical Art

- **Counting**
- **Spatial Relations**
- **Operations**
- **Patterns & Algebra**
- **Measurement and Data**

<https://prek-math-te.stanford.edu/modules/all>

### *Ben Learns How to Count*

<https://prek-math-te.stanford.edu/counting/ben-learns-how-count>



### Music Therapy for Hidden Hurts

*“The heart is a lonely hunter”*

**We can help people with PTSD, depression, dementia, clinical anxiety.**

The United States military has used music therapy for years, but sparingly. Other communities help demented people with music engagement, especially group singing.

We can do that here, too.

## USMC, "Semper Sound", Camp Pendleton



[http://www.musictherapy.org/assets/1/7/MusicTherapyMilitaryPops\\_2014.pdf](http://www.musictherapy.org/assets/1/7/MusicTherapyMilitaryPops_2014.pdf)

## Music therapy spreads mental peace



## Missouri Military Veterans at Truman VA Hospital



## Group music activity expands quality of life



<https://www.nhs.uk/video/Pages/singing-for-the-brain.aspx>

## Remember ... connect ... Quality of Life

'I love Singing for the Brain® which I call singing for the soul. The group lets me meet other people with dementia, which makes me feel that I am not so different after all.' - Irene, who has dementia



## A Fundamental Plan

Build a team, build a bucket for abundance.  
 Maximize use of space.

### Teams of Collaborators

- Academy Music
    - Teacher
    - Mentor
  - Academy Therapy
    - Therapist
    - Children
    - Adults
    - Groups & singles
    - Mentor & instructor
- ↕
- Neighbor children
  - Outside community groups
  - Student interns
  - Neighbors
  - Outside groups
  - Medical community
  - Student interns

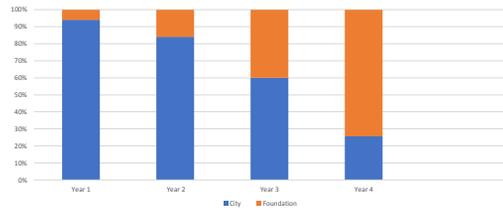
### Relational Opportunities



### Dual organization



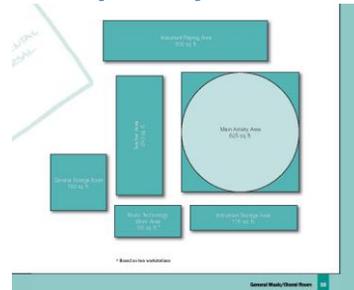
### Funding Sources



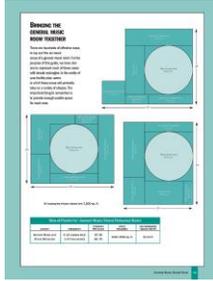
### Time to Organize Our Solution: One Year

- Boards for each organization
- Organize entity structures
- Build partnerships with academia, medicine, education, arts, potential philanthropies
- Identify facility and secure space and refit, or acquire and build out in location close to targeted populations
- Recruit specialized staffing, not readily available in the community
- Pre-Ks are wait-listed, music therapists not practicing in Jonesboro

### Space requirements



2,500 to 3,000 sq. ft.



Where are the people who need the most?

<https://statisticalatlas.com/place/Arkansas/Jonesboro/Age-and-Sex>

Start there, and expand outward after success.

Convenient locations attract families.



What about cost?

A preliminary estimate  
(Good news: It's not a Jumbotron)

LATENT HUMAN POTENTIAL in JONESBORO



(Maps not to scale) Budget A – Year 1 of 5, prepare

Activity	Brief description	Amount
Organize & Incorporate x 2 entities	Legal, accounting, find boards & plan, annual reports, expense	\$ 30,000
Lease, maintenance, security, custodial svc & supplies, business insurance, phone line – tenant-supplied	Lease @ \$15/sq. ft. (2,500 sq ft), incl. 4G Wi-Fi	47,500
Interior preparation, incl. architect	Plan & prepare space with acoustical considerations	20,000
Instruments & instructional music materials, sound system, math supplies, storage, furniture, office supplies	Starter set of 6 Orff mallet instruments & carts, numerous percussion, therapy instruments, posters & easels, large locking cabinets, tables, chairs, Eris E10XT 10" speakers (2), cables, MG10 mixer board, microphones (2), computer, DVD/CD player, MP3 player, magnetic white board (2), tack board, music rug(s), 4 music stands, mats, digital keyboard, opt. tympanus, IWB bundle with software	70,000
Professional personnel, part time < 30 hrs/wk, if incl space for lessons	Music Instructor Math Instructor, Music Therapist, PD, E & O – pay into foundation for recruiting purposes	opt. 5,000 120,000
<b>TOTAL</b>		<b>\$292,500</b>

