Music meets Medicine: Looking into the Mind, Body and Soul for the wellness that music brings

INTERDISCIPLINARY SOCIETY FOR QUANTITATIVE RESEARCH IN MUSIC AND MEDICINE



8th Biennial International Conference June 14-15, 2025 The University of Utah College of Fine Arts Salt Lake City, Utah, USA



The Interdisciplinary Society for Quantitative Research in Music and Medicine



About ISQRMM

The Interdisciplinary Society for Quantitative Research in Music and Medicine (ISQRMM) is a 501(c)(3) not-for-profit, US-based organization. It was founded in 2011 by Professor David Akombo, PhD; Jorge Camara, MD; and Dr. Joseph Ruszkowski, PhD. The society comprises scholars and practitioners dedicated to exploring the effects of music on the human body, mind, and soul through both quantitative and qualitative research methods. Members disseminate their research and practice findings through peer-reviewed conferences and publications in the <u>Journal of the Interdisciplinary Society for Quantitative Research in Music and Medicine</u>.

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Our







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Welcome Message from the President

"Music can lift us out of depression or move us to tears - it is a remedy, a tonic, orange juice for the ear. But for many of my neurological patients, music is even more - it can provide access, even when no medication can, to movement, to speech, to life. For them, music is not a luxury, but a necessity." (Oliver Sacks, 1933-2015)

Dear Conference Participants:

On behalf of the Interdisciplinary Society for Quantitative Research in Music and Medicine (ISQRMM), it is my pleasure to welcome you to the 8th Biennial Conference of ISQRMM 2025, hosted at the University of Utah in Salt Lake City, USA. Since the 18th century, scholars from both the humanities and biomedical fields have been captivated by the measurable effects of music on the human body, mind, soul, and spirit. In the 21st century, this interdisciplinary exploration continues to thrive, driven by rigorous academic inquiry and scientific curiosity. This conference serves as a platform for researchers, practitioners, and thought leaders to delve into the profound and still-unanswered questions surrounding music as medicine. We look forward to insightful discussions, groundbreaking research, and the opportunity to advance our understanding of music's impact on health and well-being.

The history of ISQRMM dates back to our inaugural conference in 2011 at Weber State University in Ogden, Utah, USA, which was rated among the best conferences by the Utah Business Bureau. Following that success, ISQRMM held its 2nd Biennial Conference at the University of Georgia in Athens, GA (USA) in 2013, the 3rd Biennial Conference at Immaculata University in Immaculata, PA (USA) in 2015, the 4th Biennial Conference at the University of Bridgeport in Bridgeport, CT (USA) in 2017, and the 5th Biennial Conference at Molloy College in Rockville, NY (USA) in 2019. The 2021 ISQRMM Conference was held virtually and hosted by the University of Bridgeport in Bridgeport, CT, USA, followed by the 7th Biennial ISQRMM Conference, which was also held virtually in 2023. Once again, it is my great honor to welcome you to the 8th Biennial Conference at the University of Utah in Salt Lake City, Utah. ISQRMM provides an unparalleled platform for disseminating data-driven research while fostering intellectual discourse among scholars and researchers worldwide. Over the years, ISQRMM has welcomed scholars from around the globe, including—but not limited to—India, Brazil, the United Kingdom, South Africa, Canada, China, Croatia, Austria, and the United States. We hope that the topics presented at our conferences will inspire further research and contribute to advancing our mission. We look forward to engaging with you at this conference and in the years to come. Welcome, and let's embark on this journey of discovery together!

Musically yours,

Professor David O. Akombo, B.Ed., MA, MMus, PhD Dean, Faculty of Culture, Creative and Performing Arts

The University of the West Indies, BARBADOS, WEST INDIES

President & Co-Founder, ISQRMM

Keynote Speakers Topic: Music and Medicine: Promoting Harmony for Health



Dr. Niloofar Nobakht (Niloo), MD, FASN
Associate Clinical Professor of Nephrology
David Geffen School of Medicine
University of Los Angeles, California, USA,
Founding Director of Music & Kidney Program at UCLA Health

Dr. Niloofar Nobakht (Niloo), MD, FASN is an Associate Clinical Professor of Medicine- Nephrology at the University of Los Angeles, California (UCLA) where she also serves as the Founding Director of Music & Kidney Program at UCLA Health. She is also the Executive Councilor-at-large for Women In Nephrology. Dr Nobakht successfully completed a fellowship at the University of Colorado Health Science Center in Denver, Colorado where her research focused on kidney disease. She completed a Clinical Nephrology Fellowship at UCLA's Ronal Reagan Medical Center as well as Internal Medicine residency training at the University of Southern California. She is the Fellow of the American Society of Nephrology and a member of the International Association for Music & Medicine (IAMM). Dr. Nobakht is highly passionate in her research and practice where she bridges music and medicine. As a strong advocate for the role of Music on human health, she founded the Music and Kidney Program at UCLA Health and has since been featured as a wellness champion.

Topic: The Shape of Change and the Musical We: Musical Synchronicity and Playfulness and Their Mechanistic Implications for Anxiety and Stress



Becky Zarate, PhD
Associate Dean of Research
College of Fine Arts
University of Utah, Salt Lake City, UT, USA

Dr. Rebecca Zarate is the Associate Dean for Research, Associate Professor of Arts and Health, licensed creative arts therapist, board-certified music therapist, & certified vocal psychotherapist in the Austin method, and director of the Arts and Health Innovation Research Lab in the College of Fine Arts at The University of Utah, USA. Her research profile extends across peer-reviewed journals, self – authored book on *Music Psychotherapy and Anxiety in Social, Community, and Clinical Contexts* published by Jessica Kingsley. She is internationally known for clinical research with arts-based interventions, change and mechanistic processes, anxiety disorders, stress responses, and improvisation-based methodologies. Dr. Zarate is a member of several national and international research networks, and is the co-editor for the international open – access journal, *Creative Arts in Education and Therapy: Bridging East and West Perspectives.* Email: rebecca.zarate@utah.edu

INTERDISCIPLINARY SOCIETY FOR QUANTITATIVE RESEARCH IN MUSIC AND MEDICINE SATURDAY, JUNE 14, 2025

Wellness – by	I - Dance Movement for Juliana Azoubel (Free to rence attendees)	President's Circle	
8:00 – 8:25 AM		REGISTRATION	DUMKE
Presentations are	e Concurrent in Room 302 a	nd DUMKE Recital Hall, School of Music, University	of Utah
	SI	ESSION 1	
	Presenter	Title	Location
8:30–9:25 AM	Ms. Ursula Payne, MFA Slippery Rock University Department of Dance Slippery Rock, PA, USA	The Nepantla Groove Matrix: Activating Healing Body Memory Through Soul Line Dancing	DUMKE
9:30-10:25 AM	Mandara Cromwell, CEO Kate Holland Cyma Technologies, USA	The Healing Potential of Sound Made Visible: Using Cymatic Images to Promote Health and Longevity	DUMKE
	COFFE	E BREAK 10:30 – 10:40 AM	
10:45-11:00 AM	12-time Global N	MUSIC PERFORMANCE Carla Rose Kelly London, CANADA Music Award Winning Composer and Performer	DUMKE
		Room 302	
8:30–8:55 AM	Lynn Maxfield Fiona Giudici Dr. Becky Zarate The University of Utah, Salt Lake City, UT, USA	Health-Related Responses to Performing Arts Participation: A Mixed-Method Pilot Study	302
9:00-9:25 AM	JD Hogue, MS & MM, MT-BC Kim Walter, PhD Rebecca Vaudreuil, MSW, EdM, MT-BC Creative Forces Network/HJF, USA Lori Gooding, PhD Florida State University, Tallahassee, FL, USA	The (work) Life of a CAT: Creative Arts Therapists' Workload in the Military Healthcare System	302
9:30-9:55 AM	Emily Polichette, MM, SCMT, MT-BC Huntsman Mental Health Institute University of Utah, Salt Lake City, UT, USA	Neurologic Music Therapy® in the Acute Psychiatric Setting	302

10:00 – 10:25 AM	Mark A. Johnston, MD Clinical and Research Offices, Salt Lake City, UT, USA	Research Approaches to Developing Studies and Providing Evidence-based Research Data on Music Self-Therapy	302
<u>COFFEE BREAK 10:30 – 10:40 AM</u>			
10:45-11:00 AM	MUSIC PERFORMANCE Carla Rose Kelly (CANADA) 12-time Global Music Award Winning Composer and Performer		DUMKE
		SESSION 2	
Topic: Music and Medicine: Promoting Harmony for Health Keynote Dr. Niloofar Nobakht (Niloo), MD, FASN Associate Clinical Professor of Nephrology David Geffen School of Medicine University of Los Angeles, CA, USA, Founding Director of Music & Kidney Program at UCLA Health Topic: Music and Medicine: Promoting Harmony for Health		DUMKE	
12:05-1:55 PM LUNCH (see attached list of café/restaurant options)			
SESSION 3			
Presenter Title			Location
		Tiue	Location
2:00 – 2:40 PM		POSTER SESSION	ATRIUM
2:00 - 2:40 PM 2:00 - 2:40 PM	Elsa Campbell Baden-Württemberg, GERMANY John Hogue, Hogue Music Therapy Statistics and Consulting, LLC, Jonesboro, AR, USA Jian Du, Palacký University Olomouc, CZECH REPUBLIC Katharina Issing Thomas Wosch Technical University of Applied Social Sciences Würzburg-Schweinfurt, Würzburg, GERMANY		

2:00 – 2:40 PM	David Akombo, PhD The University of the West	The Link Between Psychomusicology and Music Processing in Anxiety and Depression: A Literature	ATRIUM		
	Indies, Barbados, WEST INDIES	Review			
2:00 – 2:40 PM	Ana Paul, University at Buffalo, NY, USA	Music and Academic Performance - How Binaural Beats Can Reduce Anxiety, Stress and Sometimes Help People Sleep	ATRIUM		
2:00 – 2:40 PM	Adina Dabija LAc, MSTOM, Dipl. OM New York City, NY, USA	The Role of the Diaphragm in Reaching "Flow State"	ATRIUM		
2:00 – 2:40 PM	Steve Cho MD Tom Hurtado, EdD Yazmin Marin, The University of Utah	The impact of medical orchestras on belonging and burnout in healthcare	ATRIUM		
		SESSION 4			
	Presenter Title Location				
2:45-3:40 PM	Dr. James D. Rodriguez Texas Christian University, Fort Worth, TX, USA	Collegiate Vocal Health: Longevity and The Science Behind It	DUMKE		
3:45-4:40 PM	John Hogue, MS, MM, MT-BC. Hogue Music Therapy, Statistics, & Consulting, LLC/Missouri Southern State University	Maybe Together We Can Get Somewhere: Listening to Data to Find a Story	DUMKE		
4:45-5:55 PM	Happy Hour and Reception		ATRIUM		
MUSIC CONCERT					
Nino Reyos (6:00-6:30 PM)		DUMKE			
6:00 – 7:00 PM	Native American Musician, Salt Lake City, UT, USA		DUMRE		
	SYNKOFA - Celti	ic Jazz in 432Hz (6:30 -7:00 PM), Ogden, UT, USA			

Interdisciplinary Society for Quantitative Research in Music and Medicine Sunday, June 15, 2025

and breathin	gong with movement, sounds g - Adina Dabija (Free to erence attendees)	President's Circle		
8:30 – 8:45 AM	R	EGISTRATION		
	SESSION 1			
	Presenter	Title	Location	
9: 00 – 9:55 AM	Peter Blum Woodstock, NY, USA	Sacred Singing Metals and Trance	DUMKE	
10:00 – 10: 55 AM	Carla Rose Kelly, SACRED SCALE Music, CANADA	An Experiential Music Medicine Session for Profound Transformation	DUMKE	
	<u>COFFEE</u>	BREAK 11:00 – 11:10 AM		
]	Room 302		
	True Ott, PhD, Mother Earth Minerals, Ogden, UT, USA Theresa Ellis, LMT Owner of The Healing Tree, Eden, UT, USA	Maximizing The Potential of Music Therapy	302	
9:30-9:55 AM	John Hogue, MS, MM, MT-BC, Hogue Music Therapy, Statistics, & Consulting, LLC/Missouri Southern State University, USA	Developing Templated Notes for Creative Arts Therapists within the Military Healthcare System	302	
10:00 – 10:25 AM	Katie Lahue, SCMT, MT-BC, CMHC Eliana Rivera, MT-BC, Sara Langenberger Primary Children's Hospital campus, Salt Lake City, UT, USA	Case Examples in Pediatric Medical Music Therapy	302	
10:30 – 10:55 AM	Aramat Arnheim-Sharon, Ono Music College, ISRAEL Beth Falcone, MM, New York City, NY, USA André Chiang, Emory University, Atlanta, GA, USA	Can Cancer Cells be Affected by Voice and Sound?	302	
		BREAK 11:00 – 11:10 AM		
SESSION 2				

	Presenter	Title	Location
11:15 – 11:55 AM	A University Topic: The Shape of Chan	Keynote Becky Zarate, PhD ssociate Dean of Research College of Fine Arts of Utah, Salt Lake City, UT, USA age and the Musical We: Musical Synchronicity Mechanistic Implications for Anxiety and Stress	DUMKE
12:00-1:55 PM		see attached list of café/restaurant options)	
		SESSION 3	
	Presenter	Title	Location
	Amanda Stark, PhD, CCC- SLP Lynn Maxfield, PhD Brian Manternach, DMA Sarah McDowell, MS, CCC- SLP Elizabeth Zharoff, MM, Will Ramos, Brad Story, PhD Ingo Titze, PhD Jenny Pierce, PhD, CCC- SLP The University of Utah, Salt Lake City. UT, USA	Vocal Distortions of Epic Proportions: A Case Study of Quantifying Ten Extreme Vocalizations Used in Deathcore Music	DUMKE
	Carla Rose Kelly, SACRED SCALE Music, CANADA	Singing with the Fibonacci Spiral of Creation for Profound Transformation	DUMKE
Room 302			
2:00-2:30 PM	Juliana Azoubel, Federal University of Minas Gerais, BRAZIL and Texas Woman's University, USA	"Healing in Motion: Music, Dance, and Performance as Strategies for Transforming Intragenerational Trauma in Afro and Indigenous Brazilian Communities"	302
2:30 -3:25 PM	Dr. Emilie Roumer - Jabouin Dance Artist/Researcher Founder of "Do Gwe," Dance & Research, Toronto, CANADA	Healing the Body Through Dance	302

4:30 – 4:45 PM	CLOSING REMARKS ISQRMM Board & The U Team		DUMKE
4:00 – 4:30 PM	MUSIC PERFORMANCE Ana Paul NEW YORK, USA Composer and Performer		DUMKE
3:30-3:55 PM	Brian Manternach, DMus Lynn Maxfield, PhD University of Utah, Salt Lake City, UT, USA Aramat Arnheim-Sharon, Ono Music College, ISRAEL Kimberly James, DMus University of Nevada, Las Vegas, NV, USA Beth Falcone, MM Music Director, New York City, New York, USA Jeremy Manternach, PhD The University of Iowa, USA	The Effect of Vocalization on Heart Rate, Heart Rate Variability, and Blood Pressure	302

UNIVERSITY OF UTAH ISQRMM Event Area Map

Full interactive map available at: map.utah.edu

Conference Location:

University of Utah School of Music David Gardner Hall 1375 E Presidents Cir Salt Lake City, UT 84112

LEGEND:





Visitor Parking



Electric Vehicle Charging



All-Gender Restrooms

PARKING OPTIONS:

- · Presidents Circle (free Sat. & Sun.)
- · Northwest Garage (free Sat. & Sun.)
 - University Parking Regulations are enforced Mon-Fri., 7:00 a.m. to 8:00 p.m., and during special events as posted. Fire lanes and ADA areas are enforced 24/7.
- Free street parking also available in neighborhoods on the Northwest and West side of campus, a few blocks away. Be cautious of signs restricting parking for nonresidents or non-permit holders, some limit to 2 hours.

University of Utah Campus Security: (801) 585-2677 or 911

TRANSIT OPTIONS:

- TRAX Light rail from Downtown (Red Line toward U of U) get off at Stadium stop. 3 block walk north.
- UTA Bus Routes
 - o 2 (Closest stop to School of Music)
 - 225 (Stop at Presidents Circle)
 - 220 (Stop by Law School)
 - o 4, 213, 455, 473 (Stop by Stadium Lot)



Restaurants within walking distance:

On University Ave.

Publik Eds \$ - Locally roasted coffee, light lunch bites. 8-2 M-Sat, closed Sun.

On 200 S.

The Pie Pizzeria \$ - Award-winning, basement location. Collegiate vibes. Vegan and Gf friendly!

On 1300 E.

Subway \$ - Chain sandwich shop. M-Sat. 9-9, Sun. 11-7.

B&D Burger \$ - Family-owned burger joint. No frills. Burgers, shakes, fries. Fast and affordable. Open 11-9 daily.

Osteria Amore \$\$\$ - Excellent modern, authentic Italian food. Reservations recommended. Patio. Fri-Sat 11-2 and 4:30-10pm. Closed Sun.

Indochine Vietnamese Bistro \$-\$\$ Fresh, affordable Vietnamese fare. Great Lunch Specials. Patio. Veg/Vegan friendly. Fri. 11-10, Sat. 12-10pm, Sun. 12-9pm Rio Grande Cafe \$\$-Tex Mex in a charming renovated Firehouse! Great bar. Patio. 11am-10pm Fri-Sat, 11-8 Sun.

On Campus

University of Utah Campus Store -

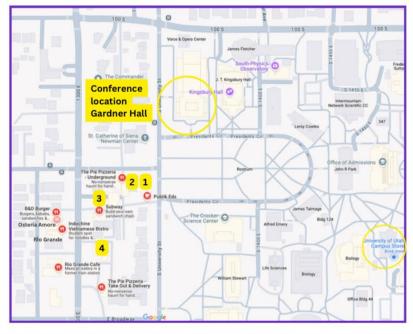
Starbucks, office supplies, U of U Swag, Convenience Store Items. Summer hours vary: (801) 581-6326. Closed Sun.

Other Services Nearby:

- 1. FedEx Print and Copy
- 2. University Pharmacy
- 3. 7-11 Store
- 4. Wells Fargo Bank/ATM

<u>ISQRMM 2025</u> <u>UNIVERSITY OF UTAH EVENT MAP:</u> <u>Restaurants and Services</u>





ABSTRACTS

Music and Medicine: Promoting Harmony for Health

Dr. Niloofar Nobakht (Niloo), MD, FASN
Associate Clinical Professor of Nephrology
David Geffen School of Medicine
University of Los Angeles, California, USA,
Founding Director of Music & Kidney Program at UCLA Health

Abstract

Music has been an integral part of human life since ancient times. As a powerful tool for expressing emotions, it has been used in daily life for relaxation, stress reduction, dance, socialization, entertainment, rituals, and religious ceremonies. Music may have both physiological and psychological effects on humans. Establishing academic centers focused on music and health can promote interdisciplinary approaches to better understand the therapeutic potential of music. Raising awareness about its potential health benefits may lead to further research and the development of guidelines for incorporating music into healthcare settings. This presentation explores the efficacy of music in clinical contexts and offers recommendations for its effective integration into medical practice.

The Shape of Change and the Musical We: Musical Synchronicity and Playfulness and their Mechanistic Implications for Anxiety and Stress

Becky Zarate, PhDUniversity of Utah, Salt Lake City, UT, USA

Abstract

Change process research is an important topic in the field of creative arts therapies (CAT). In their 2021 scoping review, De Witte and colleagues identified 19 domains from empirical studies on therapeutic factors in CAT. With the most prevalent joint factors of embodiment, concretization, and symbolic communication. In music therapy, two specific areas were identified, one, the building blocks and components of music, for example, rhythm, tempo, structuring nature of music, and the other group, grounded in interactive musical contexts for example, musical playfulness, musical synchronicity, and musical attunement. Developments have been made in methods of investigation, in theoretical framework development for sequencing, participatory action with thematic analysis of patient's statements, and mechanisms using mediation and regression analysis. Yet, knowledge is still vastly lacking about what exactly musical synchronicity and musical playfulness is, and why it is important for psychological change. To understand the mechanistic value of these factors, further investigations on the psychophysiological responses, neurobiological responses, aesthetic responses, and creativity actions and responses on the stress response system and emotional - affect regulation in anxious individuals is needed. As part of this larger scope of investigation, a framework for sequencing has been developed by Antichi, Zarate, and Giovani (2024), and an initial step of investigating the shape of change and the role of the "musical we" in music therapy and performance science via mixed-methods inquiry. The team consists of researchers of music therapy, developmental neuropsychology, vocology from three universities: University of Florence, Penn State University, and the University of Utah.

Healing the Body Through Dance

Dr. Emilie Roumer-Jabouin Dance Artist/researcher Founder of "Do Gwe" dance & research CANADA

Abstract

Our bodies are stronger than our minds. In February 2023 interview I shared the importance of movement and especially of dancing to heal the body on Canada's national television show CTV's The Social—"Our bodies are made of about 70% of water and when water stagnates, it festers bacteria." Over the last few years, I have grounded my artistic practice in Haitian folklore culture, traditions, including dance, which articulate a holistic therapeutic and scientific understanding of the body, the mind, the spirit world (or our spiritual connection to self), and our ability to heal ourselves. Some scholars and psychotherapists have argued in favor of the body's ability to regenerate itself. Psychotherapist Resmaa Menakem, author of My Grandmother's Hands: Racialized Trauma and the Pathway to Mending Our Hearts and Bodies (2017), speaks of the body's ability to heal memories and trauma of experiences at a deeper level, than the cognitive approaches that prioritize the mind. He states that, "in addressing trauma...[w]e need to [...] touch the pain or discomfort inside our trauma, and explore it—gently [...] learning to stay present." (13-14) This can be attained through movement, especially given that, "\[addressing it \] does *not* necessarily mean exploring, reliving, or cognitively understanding the events that created the trauma." (14) The Haitian rhythm of Yanvalou, which refers to supplications, or prayers, is a water rhythm that translates to a dance that rocks the body and enables the mover to balance themselves. The drum pattern and rhythm guide the body through vibrations that help the body know how to respond. Learning to move and listen to the drum is therapeutic. This presentation will both breakdown my experience of creating a piece, The Release, about my healing journey from interrupting a pregnancy, and demonstrate the connections between drumming, dancing, and healing.

> Sacred Singing Metals and Trance Peter L. Blum, C.Ht., C.I., M.S.C. Woodstock, NY 12498 United States

Abstract

Participants will experience the effects of the combination of musical frequencies produced by Himalayan singing bowls, bells, gong, and cymbals; along with a spoken hypnotic induction for relaxation and enhanced vitality. Those who have mostly listened to music created using the chromatic "tempered" scale predominant in post 1700 European and American music. The complex wave trains and overlapping frequencies produced by instruments like gongs and metal singing bowls produce intersecting standing waves, resulting in audible "beat" patterns in the alpha and theta frequency ranges. The effects these have, through entrainment, can be enhanced and augmented by carefully chosen spoken word "inductions".

The Nepantla Groove Matrix: Activating Healing Body Memory Through Soul Line Dancing

Ursula Payne, MFA

Slippery Rock University, Slippery Rock, PA, USA

Abstract

This experiential workshop explores the Nepantla Groove Matrix, a transformative framework grounded in Gloria Anzaldúa's (1987; 2015) theory of nepantla—a liminal, in-between space fostering healing and transformation. Keating's (2022) expansion of Anzaldúa's concept of La Naguala enriches this understanding by framing the groove as a mode of intuitive engagement and witnessing, where rhythm and improvisation enable dancers to access unconscious realms and foster transformative creativity. Henriques' (2003) theory of Sonic Dominance further conceptualizes the dance floor as a liberatory space where rhythmic immersion temporarily dissolves social hierarchies, allowing participants to connect deeply through shared movement. In this framework, groove becomes more than synchronized movement—it is an embodied state where the physical, emotional, and spiritual dimensions align, offering participants access to cultural and personal renewal. The music accompanying soul line dancing is central to this transformative experience, reflecting African American musical traditions and fostering cultural continuity. As Duman et al. (2023) observe, captivating and predictable musical structures create a participatory rhythm that fosters physical and psychological engagement. This aligns with Stoever's (2016) analysis of music in racialized spaces as a mechanism for reclaiming identity and creating inclusive, healing environments. Through repetition and flow, the workshop helps embed these movements into the body's vocabulary, enabling participants to carry these experiences forward as part of their movement history. Improvisation within the groove amplifies the nepantla space, allowing participants to creatively navigate life's complexities while embracing a sense of personal and communal empowerment. Over time, rhythmic immersion enhances the body's capacity to move with grace, resilience, and joy. This session offers participants a unique opportunity to explore how soul line dancing can activate and enrich body memory, fostering a pathway to wellness. By integrating theoretical insights from Anzaldúa, Keating, Henriques, and others with experiential practice, this workshop provides an embodied understanding of how groove supports emotional, physical, and spiritual resilience, making it ideal for those interested in the intersections of music, movement, and healing.

The Healing Potential of Sound Made Visible: Using Cymatic Images To Promote Health and Longevity

Dr. Mandara Cromwell¹ CEO of **Cyma Technologies**

Kate Holland¹ Sound Education Director ¹Cyma Technologies, London, UNITED KINGDOM

Abstract

"The Healing Potential of Sound Made Visible." This program is designed to introduce the concept of using frequencies known to promote health, combined with the visual and performing arts, for the purpose of elevating physical, mental and emotional well-being. Since 2001, Dr. Cromwell has been exploring a grouping of sound frequencies bequeathed to her by British osteopath, Dr. PG Manners, which had proven to enhance many aspects of health. For the last twenty years she has been working to discover the multiple applications of therapeutic sound, which is applied trans-dermally to the body with her invention of the AMI Acoustic Meridian Intelligence devices. In the presentation, this information is combined with her passion for discovering the benefits of the visual aspect of these sounds with healing potential. With cymatics, the study of wave phenomenon, the visual aspects, which were created in a laboratory setting by British acoustics

researcher, John Stuart Reid, are combined with aspects of dance and yoga in a short film entitled, "dance divine," co-produced by Dr. Cromwell and choreographer/sound therapist, Kate Holland. Ms. Holland has spent decades working with the healing arts and has utilized contemporary dance, yoga and sound therapy frequencies to create inspiring live and video performance experiences. She currently works as Sound Education Director for Cyma Technologies and educates students and private owners on the use of the AMI Acoustic Meridian Intelligence devices for health and longevity. This sixty-minute workshop, which includes the seven minute film, "dance divine," will consist of Dr. Cromwell's presentation on the discoveries on the positive impact of the visual aspect of therapeutic sound. She will demonstrate how the use of the AMI devices can promote health and assist in preventing stress-related disease. Ms. Holland will share her creative process and teach some of the elements used in the dance so that the audience can receive direct benefit from the images witnessed in the film. This workshop can be utilized as a joint presentation by Dr. Cromwell and Ms. Holland, or the film, "dance divine," can be offered alone as a special performance for conference participants. Cyma Technologies will provide AMI Acoustic Meridian Intelligence device experiences at the vendor booth during conference activities.

Developing Templated Notes for Creative Arts Therapists within the Military Healthcare System

JD Hogue, MS & MM, MT-BC Creative Forces Network/HJF Jonesboro, AR, USA

Abstract

Creative Forces – a network of creative arts therapists (disciplines: art therapy, dance/movement therapy, and music therapy) treating TBI and PTSD within the Department of Defense and Veteran's Affairs healthcare systems – designed and implemented templated notes to support the disciplines and track patient outcomes. This presentation will focus on the process and development of the templated notes and show simulated data to provide examples of the interpretable information. Teams of creative arts therapists for each discipline developed the notes through a participatory evaluation approach. The healthcare informaticist guided these teams. They developed templated notes using an S (subjective), O (objective), A (assessment), P (plan) structure. These notes used similar elements across the disciplines: 1) presenting symptoms and 2) addressed goals and symptoms. The different disciplines modified content based on their needs (e.g., nightmares as a symptom in art therapy and dance/movement therapy but not in music therapy). Possible data analyses can include the number of symptoms from initial to discharge session, a comparison of addressed goals and symptoms amongst the disciplines, and how often each discipline used their respective interventions. These data allow for a discussion about how similar each discipline is and how effective their treatment is.

An Experiential Music Medicine Session for Profound Transformation

Carla Rose Kelly SACRED SCALE® Fernie, BC, CANADA

Abstract

This workshop offers a group healing session with Music Medicine, facilitated by 12-time Global Music Award winner, Carla Rose Kelly. She will be using a wide variety of instruments which could include vocals, keys, various percussion instruments, rain sticks, harp, flutes, etc. Participants can experience the Music Medicine by relaxing in their chairs, or by lying on the floor. You are welcome to bring yoga mats/blankets. Following the experiential Music Medicine session, opportunity will be available to discuss, answer any questions, or share any effects experienced by participants.

The (Work) Life of a CAT: Creative Arts Therapists' Workload in the Military Healthcare System

JD Hogue, MS & MM, MT-BC^a Kim Walter, PhD ^a

Rebecca Vaudreuil, MSW, EdM, MT-BC ^a Lori Gooding, PhD ^b

> ^aCreative Forces Network/HJF ^bFlorida State University

Abstract

Creative Forces – a network of creative arts therapists (art therapy, dance/movement therapy, and music therapy) within the Department of Defense and Veteran's Affairs healthcare systems – designed and implemented a data collection tool to track workload productivity. Elements captured in this tool included direct-patient care (sessions and encounters), non-direct patient care (documenting, discussion meetings, preparations & disassembles, scheduling, and other), administration, program development, community engagement, research, and other. Since 2017, Creative Forces tracked workload for 53 unique creative arts therapists on a bimonthly basis. Designing the tool used a participatory approach, which highlighted non-direct patient care. Analyses indicated that the CATs engaged in direct-patient care, non-direct patient care, and administrative hours more than the other categories, Wilk's L=.22, $(6,1153)=669.29,p<.001,h^2=.78$. Music therapists spent less time in non-direct patient care than the other disciplines, $F(2,1158)=16.71,p<.001,h^2=.03$. Correlations revealed significant positive correlations amongst all disciplines between direct-patient care and non-direct patient, $rs\geq.25,ps<.01$. The findings showed that workload productivity included more than the clinical caseload, and that workload depended on the discipline. They also showed non-direct patient care as an important element when working as a creative arts therapist. These data provided a foundation for discussion about why non-direct patient care is important.

Maximizing the Potential of Music Therapy

A. True Ott, PhD Ogden, Utah. USA

Theresa Ellis Ogden, Utah, USA

Abstract

Since the days of Plato it has generally been admitted by mainstream "scientists" that SOUNDS, in the form of structured MUSIC, have indeed been shown to have an effect (either for healing or disease) on the emotional and physical health of humans. In the preceding decades "music therapy" has in fact become an official branch of medicine in various countries. Dr. Ott and Ms. Ellis have original research that is highly relevant to the validation of music therapy. Dr. Ott was a pupil of the Nobel Laureate Dr. Linus Pauling and collaborated on original research studying 21 specific mineral elements to determine WHY these specific minerals perform in the human cells and tissues. Dr. Ott, in early 1991 conducted original research and determined that the 21 core minerals Pauling identified actually pulse a specific hz frequency (sound) based on the minerals' specific atomic weight. Dr. Ott then discovered that these specific frequencies matched the 7 major notes of the chromatic musical scale, but ONLY when concert A is tuned to the "Verdi Scientific" tuning - aka the Pythagorean "Perfect Fifth" Tuning. Dr. Ott will be honored to present his original research evidencing that "music therapy" is beneficial not only to humans, but to animals as well.

Music moves - Ettlingen dementia study: A Pragmatic Randomized-Controlled Trial

Elsa Campbell^{a,b,c,e*}, John Hogue^d, Jian Du^{e,f}, Katharina Issing^g, and Thomas Wosch^g

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*Department of Music Therapy, mdw – University of Music and Performing Arts Vienna, Metternichgasse 12, 1030 Vienna, Austria

Abstract

Objectives: Because of the limited effectiveness of pharmacological treatment, there is a growing need to use non-pharmacological, music-based interventions methods when treating the behavioural and psychological symptoms of dementia (BPSD). Methods: We randomized 57 nursing home residents into individual active music therapy plus standard care (aMT), individual receptive music therapy with tactile sound vibration plus standard care (rMT), or the standard care control group (CG). A trained music therapist provided 12 sessions over six weeks. The outcomes (BPSD; depression; quality of life; medical system usage; activities of daily living; music therapy engagement) were measured at baseline (0 weeks), post-intervention (six weeks), and follow-up (12 weeks). Results: The results indicated small beneficial effects for BPSD in aMT and rMT at follow-up, a small beneficial effect for total musical engagement in aMT and rMT, a small negative effect for verbal communication in rMT, and a small beneficial effect for medical usage in the CG. Conclusion: Both aMT and rMT methods showed promise for managing BPSD and increasing engagement during music therapy. rMT may be more suited for advanced stages of dementia. Future studies should evaluate the appropriateness and effectiveness of each intervention according to disease severity.

Singing with the Fibonacci Spiral of Creation for Profound Transformation

Carla Rose Kelly SACRED SCALE® Fernie, BC, CANADA

Abstract

Musical patterns are powerful transformational tools for healing the mind, body and soul. In this experiential workshop, the focus will be on the most sacred creational pattern known to mankind. That is the Fibonacci Spiral of Creation: 0, 1,1, 2, 3,5,8, 13, 21, 34...infinity. This sacred mathematical sequence of creation is evidenced throughout our known world as everything in it is created in the same pattern, including the human body. During this experiential workshop, you will be guided to singback or just listen, to positive affirmations using the Fibonacci Spiral of Creation pattern. This will entrain our mind, body and soul to this Divine pattern of universal creative energy. A brief explanation of the Fibonacci Spiral will begin the workshop, followed by a group singing experiential, finishing with a sharing of experiences with the same.

Case Examples in Pediatric Medical Music Therapy: A Panel Presentation

Katie Lahue, SCMT, MT-BC, CMHC¹ Eliana Rivera, MT-BC, ² Sara Langenberger ³

¹Primary Children's Hospital, ^{2,3}Primary Children's Hospital campus, Salt Lake City, UT, USA

Abstract

Pediatric medical music therapy, defined by Ghetti (2012) is "the use of music and the therapeutic relationship to promote healthy coping and safeguard the child's psychosocial well-being during inpatient and outpatient medical treatment". This evidence-based practice leads to improved physiologic outcomes such as reduced pain perception, decreased cortisol levels, lowered heart rate, blood pressure, and respiration rate as well as psychosocial outcomes like reduced anxiety and stress, increased coping behaviors and overall improved quality of life (Bradt, 2013). Primary Children's Hospital offers music therapy to address all of these areas of need and more. The music therapists build strong therapeutic relationships through a variety of therapeutic approaches with patients ranging in age from infants to young adults as well as the families of the patients. This panel will present case examples in music therapy from Primary Children's Hospital to demonstrate the breadth of work being done to support patients and their families in their most difficult times.

Effect of Vocalization on Heart Rate, Heart Rate Variability, and Blood Pressure

Brian Manternach, DMus.

Department of Theatre University of Utah, Salt Lake City, UT, USA

Lynn Maxfield, PhD
Director, Utah Center for Vocology,
School of Music, University of Utah, Salt Lake City, UT, USA

Kimberly G. James, DMus School of Music, University of Nevada, Las Vegas, NV, USA

Aramat Arnheim-Sharon Ono Music College, Rimon Music College, Aramat Vocal Studio, ISRAEL

> Beth Falcone, MM Music Director/Voice Teacher, New York City, USA

Jeremy Manternach, PhD Area Chair of Music Education, The University of Iowa, USA

Abstract

This presentation provides an overview of available literature that demonstrates how voicing affects heart rate, heart rate variability, and blood pressure. In this investigation, mechanical vibratory stimulation from voicing or audiation is considered to result from direct transfer from the vibrating vocal folds within the body, sound pressure waves radiated from the mouth, and vibrations received by the ear, among other mechanisms. Several promising pathways appear in the literature. One study indicates an increase in the production of nitric oxide in the nasal passageways during humming. Others indicate changes of breathing patterns as a result of singing, while others explore how a mother's voice may be used as therapy in premature babies. Studies on auditory stimulation with music show that a synchronization between the tempo or musical

patterns to heart rate may occur as well as a possible reduction in emotional stress when singing or listening to music. This presentation underscores the necessity for focused research on the direct impacts of music participation and listening on heart rate and blood pressure.

Can Cancer Cells be Affected by Voice and Sound?

Aramat Arnheim-Sharon Voice teacher, Ono Music College, Rimon Music College, Aramat Vocal Studio

> Beth Falcone, MM Music Director/Voice Teacher, New York City, USA

> > André Chiang Emory University, Atlanta, GA, USA

Abstract

This presentation provides an overview of available literature that demonstrates how voicing may affect cancer cells directly or directly. In this study, vibratory stimulation from sound and voicing are discussed by understanding mechanisms, levels of vibrations and frequencies and how those may relate to physical changes in the body that relate to cancer. Literature shows potential in voicing specifically and sound waves in general that are currently being used as complementary treatments. Exploration of cymatics as sound affects matter will be accompanied by studies on auditory and non-auditory stimulation with music and vibrations and the effects shown on different types of cancer cells. Relationship of hormonal changes and emotional reaction to singing among cancer patients will also be discussed. This presentation will suggest ideas for future experimental research on the direct impacts of voicing and cancer cells reactions.

Health-Related Responses to Performing Arts Participation: A Mixed-Method Pilot Study

Dr. Lynn Maxfield¹
Associate Director of the National Center for Voice

Fiona Giudici^{1*} Research Associate

Dr. Becky Zarate¹

¹The University of Utah, Salt Lake City, UT, USA

Abstract

Over the past two decades, research on the intersection of art-making and health has grown, alongside a shift in western medicine toward integrative approaches. Increasing evidence suggests a positive link between arts participation—particularly music—and improved health and wellbeing, including reduced stress, enhanced immune response, and better emotional regulation (DeWitt et al., 2020; Fancourt et al., 2014; Chanda & Levitin, 2013; Grape et al., 2003). However, the mechanisms driving these benefits remain unclear. This talk presents a pilot study from the University of Utah exploring which elements of arts-based interventions most strongly impact health biomarkers. Using a mixed-methods approach, we tracked biometric wellness measures (endocrinological, hormonal, and cardio-pulmonary) before, during, and after participation in various artistic activities (singing, wind instruments, string instruments, and theatre), both with and without audiences. Additionally, qualitative data from focus groups, stress rankings, and quality-of-life assessments were collected to provide a holistic perspective on participants' experiences. This study aims to clarify how arts participation influences health and inform future integrative medical approaches.

Vocal Distortions of Epic Proportions: A Case Study of Quantifying Ten Extreme Vocalizations Used in Deathcore Music

Amanda Stark, PhD, CCC-SLP Lynn Maxfield, PhD Brian Manternach, DMus Sarah McDowell, MS., CCC-SLP Elizabeth Zharoff, MM Will Ramos, Brad Story, PhD Ingo Titze, PhD Jenny Pierce, PhD, CCC-SLP

Abstract

Introduction: Since its inception in the early 1970s, metal music has not received the same degree of attention from those in the musicology and voice science communities as other genres despite its growing popularity. Experts have yet to determine what central characteristics or combinations of characteristics distinguish these vocal sounds. We aimed to understand how the laryngeal mechanism adjusted to produce each extreme vocalization produced by a deathcore artist, Will Ramos. Methods: Simultaneous nasoendoscopy, acoustic recordings, and laryngeal EMG were undertaken across several extreme vocalizations. A separate MRI session was also completed. Video recordings were analyzed to identify supraglottic sound sources used during extreme vocalizations combined with muscle activation plots of seven intrinsic and extrinsic laryngeal muscles with corresponding acoustic analysis of spectral centroid. dMRI/MRI of vocal tract shape changes were quantified by measuring the cross-sectional areas using Mimics Innovation Suites (MIS). Conclusion: This study scientifically stratified ten extreme vocalizations using laryngeal EMG, acoustics, laryngeal anatomy, and dynamic and static MRI to highlight broad distinctions of the interactive nature of multiple sound sources used in extreme vocalizations. These methodologies can be used to classify the unique sounds of this increasingly popular genre.

Research approaches to developing studies and providing evidence-based research data on Music Self-Therapy

Mark A. Johnston, MD Diplomate, American Board of Psychiatry and Neurology, Salt Lake City, UT, USA

Abstract

Music therapy has a long-established history as a psychological treatment approach and numerous evidence-based research studies have been conducted noting its benefits for multiple indications. Formal research in music therapy has been ongoing for more than 30 years and methodologies have been developed to more accurately define music therapy, understand its potential impact, and to measure its therapeutic benefits. However, the primary music therapies that have been researched are facilitated, group music therapies and individual therapies. Though mention is often made of continuing to use music as part and self-care at home following the conclusion of formal music therapy, there is a paucity of evidence-based information on music self-therapy. In addition, self-therapy approaches for people not transitioning from formal therapy have not been well described or researched. In this I shall provide a recommendation of a research approach to developing studies and providing evidence-based research data on Music Self-Therapy or MST. This presentation will seek to provide a foundation on how research projects examining Music Self-Therapy (MST), could be structured and organized.

Collegiate Vocal Health/Longevity & The Science Behind It

James D. Rodriguez, PhD Texas Christian University, Fort Worth, TX, USA

Abstract

Students cast in collegiate productions must pay careful attention to their own vocal health as they progress through a rehearsal process. The length of the process varies based on institution and production, but often lasts six to eight weeks. Students must balance their time commitment to the rehearsal schedule with daily academics such as voice lessons, choir rehearsal, production rehearsals, and non-singing based classes to maintain an optimal level of singing that meets the demands of their assigned roles. Several studies have been conducted to understand the vocal health practices of students, pre-professionals, and professionals in a variety of settings including choral, opera, and musical theatre. Sample strategies for understanding vocal health described in the literature include surveys, data collection, and videostroboscopy. While these studies focus on a specific area of the performing arts, this presentation examines the differences and similarities of how individuals in different concentrations of the performing arts gauge their own vocal health. This presentation will also discuss strategies that teachers can employ with students to minimize vocal fatigue and ensure vocal health and longevity throughout the rehearsal process. Strategies will include discussions related to semi occluded vocal tract exercises, Voce Vista, vocal cool downs, and topical hydration, among others.

Dyslexia and the Musical Mind

Kent Nelson, DMA Salt Lake City, UT, USA

Abstract

Dyslexia can have profound effects on people with this learning disability and their learning music. Dyslexia, in the music realm, may reveal itself with problems in learning rhythm, with processing speed, fluency, concentration, and music reading (Ganschow, Lloyd-Jones, & Miles, 1994). Despite these and other challenges associated with this learning disability, individuals with dyslexia can and have succeeded in learning music and made it their profession. Five professional musicians with dyslexia were interviewed in order to learn the best approach for teaching students with dyslexia music. Background information on these five musicians was gathered to learn of their early homelife, general schooling, and challenges learning music. While the study did support past research of teaching students with dyslexia music (principally a kinetic approach), other methods and approaches were also revealed and encouraged. These included the use of jazz or other non-music reading genres, enlisting private tutors, choosing the correct private teacher, and knowing a person's legal rights in schooling.

The Link Between Psychomusicology and Music Processing in Anxiety and Depression: A Literature Review

David O. Akombo, PhD
The University of the West Indies, West Indies

Abstract

Psychomusic Processing could describe how the brain and mind process music on psychological and emotional levels—especially in relation to mental health conditions like **anxiety and depression**. This interaction includes how music influences mood and cognition, the neural mechanisms involved in music perception, and the therapeutic effects of music on mental health. To date, the larger field of music, brin and

mind has been devoted to **Psychomusic Processing**. However, more studies are needed to examine the catharric narure of music within the pychomusicological processes to identify the association areas in the brain that create the atmosphere of relaxation derived from the music. Studies show that music can improve the pain relief, reduce high blood pressure, promote post-stroke recovery, headache and migraine remedies, immunity booster, anti-seizure symptoms, the general well-being all of which are connected to the central nervous system (CNS). This presentation explores psychomusicology, music's therapeutic effects, neural mechanisms, and its impact on mental health.

Neurologic Music Therapy® in the Acute Psychiatric Setting

Emily Polichette, MM, SCMT, MT-BC Huntsman Mental Health Institute, Salt Lake City, UT, USA

Abstract

Neurologic Music Therapy® (NMT) is a recognized gold standard in Physical Medicine and Rehabilitation, utilizing 20 evidence-based techniques grounded in auditory and music-based neuroscience to enhance non-musical brain and behavioral functions. However, research on its application in acute mental health settings is limited. The Huntsman Mental Health Institute recently celebrated 30 years of music therapy services, including a clinician specializing in NMT. This session aims to introduce NMT to a broader audience and explore its potential as a gold standard of care in psychiatric settings. Attendees will gain insight into how NMT translates non-musical behaviors into musical exercises, enhancing its therapeutic applications in mental health care. They will also learn how NMT can be applied in acute psychiatric settings, providing examples of its value in supporting functional goals. Additionally, attendees will explore how to engage with the Academy for Neurologic Music Therapy, gaining access to valuable resources and opportunities to deepen their understanding of this specialized field.

Healing in Motion: Music, Dance, and Performance as Strategies for TransformingIntragenerational Trauma in Indigenous and Afro-diasporic Brazilian Communities

Juliana Azoubel, MA

Federal University of Minas Gerais, BRAZIL, and Texas Woman's University, Denton, TX, USA

Abstract

This study investigates Music, Dance, and Performance as healing and community-building strategies in Indigenous and Afro-diasporic Brazilian communities. It examines dance, music, and performative behavior not only as particular kinds of knowledge but as ways to access other types of knowledge. Embodied knowledge, that is, knowledge found within and expressed through the body, is addressed as knowledge that informs and challenges hierarchical kinds of expertise, builds communities, and possibly heals. Through Art-Based Research (ABR), the engagement in "...methodological tools used by qualitative researchers across disciplines during all phases of research, including data collection, analysis, interpretation, and representation" (Leavy 2015, 2-3), this ethnography investigates the traditional Dance, Music, and Performance practices in Belo Horizonte, in the Brazilian Southeastern state of Minas Gerais. Interviews and videos collected during the artist/researcher's engagement in spiritual practices and community events demonstrate how community members have attributed meanings to their experiences. Processions, chants, call-and-response, movement synchronization, virtuosity, and theatricality emerge as central activities, transforming the intergenerational trauma of slavery into contemporary healing practices.

Music and Academic Performance - How Binaural Beats Can Reduce Anxiety, Stress and Sometimes Help People Sleep

Ana Paul Psychology Student University at Buffalo, New York, USA

Abstract

There are several studies showing that binaural beats can reduce anxiety, stress and sometimes help people sleep. I would like to see if these sounds can also help college students focus. To investigate this phenomenon, this pilot study will survey college students aged 18 and older. It will consist of three parts; Research, surveying and testing a hypothesis out in practice. Methodology: First I will randomly select a group of students and have them complete a task while not listening to any music. Afterwards I will divide the group into two randomly selected groups and have both of them complete the same task. Group A will complete the task while listening to binaural beats and Group B will complete the task while listening to their personal music playlist. This research will utilize opportunity sampling methods in a between-subjects research paradigm. Data will also consist of analysis of data collected by scientists on the topic of effects of binaural beats on anxiety, stress, and sleep disorders. Participants will be asked to complete a survey before and after the experiment. In the first survey they will be asked about their study habits, if they prefer studying in silence or with music, and whether or not they believe music impacts their focus. The second survey is to be completed after the experiment. Students will be asked if they noticed a change in focus, after listening to binaural beats or their own personal music playlist. For the third portion of my research. Results: I will analyze and compare their performance and the amount of time that it took them to complete the task each time. Afterwards I will see which group had a higher rate of improvement while completing the task the second time. If the two groups have similar results, the Hypothesis, being that binaural beats improve focus, will be rejected. To conclude my study I will summarize my personal findings in a paper and compare them to the statistics gathered from other peer-reviewed articles.

Deep Breathing as a Tool to Promote and Enhance Flow State

Adina Dabija, L.Ac, Dipl.O.M. Founder Sol Center, New York, NY, USA

Abstract

The role of students in this initiative is central to the success of this project. Students will be active participants in research, education, and creative expression, contributing to the development of Afrofuturist thought in the Caribbean. They will engage in research by exploring Afrofuturist themes in Caribbean literature, music, and film, analyzing how these elements shape cultural identity and societal transformation. Their research will contribute to a growing body of scholarship on Afrofuturism in the region. They will participate in education and curriculum development through courses and workshops, while studying Afrofuturist theory and practice, gaining insights into its impact on Black identity, technological innovation, and speculative storytelling. They will collaborate with us to develop new perspectives. Students will create and perform spoken word pieces using spoken word as a medium to express Afrofuturist ideas, and participating in workshops, competitions, and performances that challenge colonial histories while reimagining future possibilities for the Caribbean people and minority groups in Canada. Students will compose and experiment with music by blending traditional Caribbean rhythms with futuristic sounds, while collaborating with musicians to create compositions that reflect Afrofuturist themes, sonically mapping the future of the Caribbean. Students will produce Afrofuturist Films by engaging in filmmaking projects, using visual storytelling to explore alternative realities and challenge historical narratives. Through screenings and discussions, they will showcase their work to academic and public audiences. Their work will be showcased in

public events at the University of the West Indies in Barbados and at the Ontario College of Art & Design University, Toronto, Canada. Beyond university settings, students will present their research and artistic creations at cultural festivals including the National Independence Festival of Creative Arts (NIFCA), Film screening events, public lectures, and digital platforms, fostering wider discussions about Afrofuturism s role in shaping Caribbean and global futures.

The impact of medical orchestras on belonging and burnout in healthcare

Steve Cho MD¹ Tom Hurtado, EdD² Yazmin Marin³

Affiliations

¹ University of Utah.

²Senior Director of Student Affairs and Professional Identity Formation, Spencer Fox Eccles School of Medicine, University of Utah.

³Learning and Cognition program at the University of Utah.

Abstract

Professional Identity Formation (PIF) in medicine seeks to develop personal values and professional relationships that contribute to fulfilling healthcare careers. Medical humanities are increasingly integrated into healthcare settings with beneficial impacts on PIF. However, little research has been done on the effect of medical community orchestras on PIF. Here, we surveyed and interviewed members of the Utah Medical Orchestra (UMO), a community ensemble at the University of Utah comprised of healthcare workers, trainees, and students in Salt Lake City. Comparing retrospective pre-to-post ratings, 29/60 respondents (48%) indicated significant increases in sense of belonging, understood identities, and encouragement in musical endeavors (p<0.001). Members also indicated a reduction in experiencing burnout with participation. Qualitative interviews of 15 members confirmed these findings, revealing themes of increased growth mindset, benefits of escape from work responsibilities, and development of interprofessional relationships. These quantitative and qualitative findings demonstrate the positive impacts of medical orchestras on PIF.

About Conference Presenters



Ursula O. Payne is a Professor of Dance at Slippery Rock University and the Associate Provost of Academic Administration with over 29 years in academia. A PhD candidate in Dance Studies at Texas Woman's University, her research focuses on African American dance practices, embodiment, and the Nepantla Groove Matrix theory. She holds an MFA in Dance from The Ohio State University and a BA in Dance from Slippery Rock University. A nationally recognized choreographer, Payne's choreographic commissions include works presented at venues such as Lincoln Center, Jacob's Pillow, Joyce Soho, the August Wilson Center, and the National Arts and Cultural Center in Taiwan. Her work as a movement director includes *Obi Mbu (The Primordial House)*, an internationally screened dance film exploring Igbo creation myths. Payne is a Certified Movement Analyst (CMA) specializing in Laban Movement Analysis, Motif Notation, and Bartenieff

Fundamentals. She also holds a Collective Trauma Healing Certificate from the Academy of Inner Science. She continues to bridge academia and performance, using dance as a tool for cultural storytelling, research, and social engagement. She can be reached at Ursula.payne@sru.edu



Mandara Cromwell, CEO of Cyma Technologies, studied early cymatic therapy with British osteopath Peter Guy Manners, and was awarded the *Diplomat of Cymatic Bioenergetic Medicine*, at Bretforton Hall in the UK. She later received her doctorate through Medicina Alternativa in Sri Lanka in 2004. She has made it her life's work to take Dr. Manners' work to greater heights through ongoing research, education and collaboration. Extended travel to India and China gave her insights into the ancient teachings of Ayurveda and Chinese medicine, which she combined with the healing power of sound to innovate her own set of AMI Acoustic Meridian IntelligenceTM devices. The AMI 750 was nominated for the 2013 Thomas Edison Award for Innovation in the Fields of Science and Medicine. In 2022 she released the AMI 850, the next evolution of the AMI 750. Cyma Technologies, as envisioned by Dr. Cromwell, is a futuristic, spiritually inspired company, which manufactures sound therapy devices to create vibrant health, jobs of the future and new ways of thinking.

She is the founder of the International Sound Therapy Association (ISTA) and promotes the science of cymatics through conferences, products and educational courses. She can be reached at <a href="mailto:ma



Kate Holland, Sound Education Director for Cyma Technologies, has practiced the science and healing art of CymatherapyTM since 2006. Working to promote the idea of sound as a healing modality, she has written manuals, provided training and inspiration to numerous healthcare practitioners, while providing guidance to many at-home users in their quest for more vibrant health through AMI Acoustic Meridian Intelligence devices. Her education has included nurses training, pranic healing, the high practice of yoga with two masters - Yogi Amrit Desai and Divine Mother Karunamayi. She has also studied with the Chieftainess of the Cherokee nation, Dhyani Ywahoo, reflective of her own native heritage. With more than twenty years of dance experience as a performer, teacher and choreographer, she believes that the healing arts, particularly sound therapy, create a vibrational medicine that can truly change the world. She has produced dance performances inspired by the beauty of sound-made-visible imagery to include, "dance divine" and "Beyond The Sun."



JD Hogue, MS & MM, MT-BC serves as the Senior Informatics Specialist for the Creative Forces Network. He is a statistician and board-certified music therapist with over 10 years' experience combining data analysis, research, and program evaluation. JD has a Master of Science degree in Quantitative Psychology and another Master of Music degree in Music Therapy from Illinois State University and has studied abroad in France and New Zealand. He is also a consulting editor for Music Therapy Perspectives and has published in peer-reviewed journals, such as Psychology of Music, Journal of Social Psychology, and Intersection. JD started working with Creative Forces Network in 2018. Before then, he was Adjunct Faculty

and the Assessment Coordinator for Missouri Southern State University. He can be reached at jhogue@hjf.org



Rebecca Vaudreuil, MSW, EdM, MT-BC. Rebecca Vaudreuil serves as the Lead Music Therapist and Clinician Supervisor for Creative Forces. She is a board-certified music therapist who earned a music therapy degree at Berklee College of Music, a master's in educational neuroscience at Harvard University, and a master's in social work at Fordham University. She has completed advanced training in neurologic music therapy, neonatal intensive care music therapy, and music-assisted childbirth. Rebecca develops music therapy best practices, provides clinical and research mentorship, promotes arts-based partnerships between clinical and

community settings, and supports increased access to creative arts therapies research across military and veteran healthcare systems. Rebecca publishes in both arts-based and multidisciplinary rehabilitation peer-reviewed journals, and she edited a seminal book on Music Therapy with Military and Veteran Populations. Her work has been featured by CNN, ABC, PBS as part of the Memorial Day Capital Concerts, and in a White House Blog. She can be reached at revaudreuil@hjf.org



Lori Gooding, PhD, MT-BC, Lori is an Associate Professor of Music Therapy at Florida State University. Gooding taught at Charleston Southern University and founded the academic and clinical music therapy programs at the University of Kentucky before joining the FSU faculty in 2015. Her research and teaching interests include music therapy in mental and physical healthcare, with particular focus on biopsychosocial care, patient-and family centered care, and music therapy education. Gooding's publications appear in a variety of

refereed journals including the Journal of Music Therapy, Music Therapy Perspectives, and Medical Problems of Performing Artists. She is editor of Medical Music Therapy: Building a Comprehensive Program and co-author of Procedural Support Music Therapy: A Guide to Evidence-Based Practice and Program Development. Gooding is Immediate Past President of the American Music Therapy Association and a member of the editorial board for the Journal of Music Therapy. She has presented nationally and internationally. She has also received several grants, including a Fulbright grant to Malaysia. She received the BME degree from the University of South Carolina and the MM and PhD degrees from Florida State University. She can be reached at Igooding@fsu.edu



Elsa Campbell, PhD is Assistant Professor at mdw – University of Music and Performing Arts Vienna and head of WZMF – Music Therapy Research Centre Vienna, Austria. She is the coordinator of the VIBRAC Skille-Lehikoinen Centre for Vibroacoustic Therapy and Research, Jyväskylä, Finland, and collaborates with the Centre of Evidence-based Education & Arts Therapies, Olomouc, Czechia. Her research focuses on the use of vibroacoustic therapy as a receptive music therapy method in dementia care. She can be reached at campbell@mdw.ac.at



Jian Du is a doctoral student at Palacký University, Olomouc, Czechia and a researcher at the Centre for Evidence-based Education and Arts Therapies. He can be reached at jian.du01@upol.cz



Katharina Issing, BA, is a social work graduate from the Technical University of Applied Sciences Würzburg-Schweinfurt, Germany. She can be reached at katha_mack@web.de



Thomas Wosch, PhD is professor of music therapy at the Technical University of Applied Sciences Würzburg-Schweinfurt, Würzburg, Germany. He is head of the Master's programme Music Therapy for Empowerment and Inclusion, head of the music therapy lab, German PI of the EU-JPND research project HOMESIDE and associated with EU-JPND research project MIDDEL. His research foci are microanalysis in music therapy, music therapy assessment, music therapy outcome research in dementia care and for late life depression, and indirect music therapy for caregivers and families. He can be reached at Thomas.wosch@thws.de



Emilie "Zila" Jabouin, PhD is an international dance artist, doctor of communication studies/researcher, emerging producer, story-teller and public speaker living in Tkaronto (Toronto, Canada). She founded an art-based company, Do Gwe dance and research that merges performance and socio-historical research into artistic productions for social transformation, healing, and collective liberation (www.emiliejabouin.ca). Emilie "Zila" Jabouin is a multi-talented dance artist, researcher, emerging producer, and story teller living in Tkaronto, Turtle Island (Toronto, Canada), who produces stories for collective liberation and social transformation. Emilie has worked with Ballet

Creole, Kashedance, Ronald Taylor Dance, Mafa Dance Village, Lua Shayenne Dance Company, and Esie Mensah in traditional and contemporary Caribbean and African dance forms merged with Ballet and modern dance techniques; traditional South African and Guinean dances; and African contemporary and fusion forms, including some African street dances. Training since 2020 with Master dancer and drummer Peniel Guerrier (NYC), as the inaugural student of his professional KASE DANS training program, Emilie reconnects to Haitian folk culture as the foundation of her art practice (drumming, dancing, and singing). In 2020, Emilie also founded Do Gwe dance and research, an art-based company that merges dance and socio-historical research into artistic productions. She won artistic creation and professional development grants from the Ontario Arts Council, the Canada Council for the Arts, and dance Immersion that provided her necessary support to start creating her own work. Since 2022, Emilie has been working on a full-length piece, The Release, about Afro-Caribbean women, gender non-binary and trans birthing persons' experiences with [interrupted] pregnancies and bodily autonomy; sections of which she has performed in Ayiti (Haiti), Canada, and the United States between 2022 and 2024. Emilie recently completed an artistic residency in Barbados in August 2024 where she researched, immersed herself, and prepared a solo dance that reflected local stories and realities, "We Loud with Quiet." She performed it at Pebbles Beach - a historical location tied to the arrival of the ships carrying enslaved African peoples to the island. Emilie aspires to produce more shows as an emerging producer and a uniquely positioned dancer/researcher who thinks in terms of the bigger picture and deeper messages. She produced her first show, "Un Voyage à travers la danse/ A Journey through dance" in December 2023 by curating four Black women performers' stories (including her own) in relationship to the French language, identity, and navigating their environments through dance, while coproducing the music. Emilie has also been featured as a dancer, drummer, and singer in the critically-acclaimed work of Dr. Camille Turner's NAVE, a groundbreaking multimedia installation on Canada's historical involvement with the enslavement of African peoples that found connections between Senegal, Hispaniola (where Emilie has ancestral connections), and Canada in the 1700s. The National Gallery of Canada acquired the piece in 2023 following its national success. Emilie also teaches weekly Haitian dance classes for the public. A doctor of communication studies, a writer, and public speaker, Emilie has written peer-reviewed articles, including "Black Women Dancers, Jazz Culture and 'Show Biz'," which received an honourable mention for the Canadian Historical Association Jean-Fecteau prize in 2022. Her academic and artistic research interests overlap and include celebrating Black women in the Americas, documenting intellectual and performance histories, exploring the body, archives and newspapers, promoting wellness and discussing Black liberation movements. She can be reached at emijabouin@gmail.com



Kim Walter, PhD serves as the Clinical Program Evaluator for Creative Forces. Dr. Walter holds a PhD in Biobehavioral Health from The Pennsylvania State University, a BS in Nursing from the University of Virginia, and a BA in Psychology from Connecticut College. She completed a National Institute on Alcohol Abuse and Alcoholism Postdoctoral Fellowship at the University of Connecticut School of Medicine. During her Postdoctoral Fellowship, Dr. Walter was involved in research and evaluation projects examining behavioral economic interventions for chronic diseases, including substance use disorders and diabetes. She can be reached at kwalter@hjf.org



Adina Dabija, L.Ac., MSTOM, Dipl. O.M. Adina is the Founder Sol Center www.sol.center Adina Dabija is a writer, philosopher and western esoteric arts practitioner. Adina currently lives in New York, where she practices Chinese medicine. She published several books of poetry and fiction. She is also a priestess of Dionysus in the ancient Orphic mystery tradition, an initiatic lineage of Hellenic priesthood passed down directly from teacher to student. She can be reached at quintessenceacu@gmail.com



David O. Akombo, PhD is Associate Professor and Dean of the Faculty of Culture, Creative and Performing Arts at the University of the West Indies, Barbados. Dr. Akombo previously served as Diversity Fellow at Weber State University in Utah and Faculty Fellow at Jackson State University in Jackson, MS. Intrigued by the peculiarities of music and its interdisciplinary confluence with medical and psychological practices, Dr. Akombo has studied and researched the effects of music on children and young adults both in schools and in hospitals. As scholar and performer, Dr. Akombo balances his research interests amicably as a music educator, ethnomusicologist, composer and singer/drummer, having worked in Africa, The United States, and Southeast Asia where he studied with Balinese artists. His books, *Music and Healing*

Across Cultures (Ames, Iowa: Culicidae Press, 2006) and Music and Medicine: Connections Found (Seaburn, 2009) unfold the mechanics of the relationships between music, culture, physiological and spiritual states in people from the anthropological and epistemological inquiry regarding music and healing. Dr. Akombo has worked jointly with the University of Florida's Center for Arts in Healthcare Research and Education (CAHRE) with which he collaborated to establish the Arts in Medicine (AIM) program in Nairobi, Kenya. Located at Mater Hospital and funded by the Legislature and State of Florida Center for Cultural Affairs in Tallahassee, USA, this is the first known Arts in Medicine program in Africa. Dr. Akombo continues to be active in music education research, and interdisciplinary scholarship having conducted clinics in several countries. He is a 2017 recipient of the NSF Research Training Scholarship. He is the President and Co-Founder of ISQRMM. He can be reached at dakombo@isqrmm.com



Peter L. Blum, C.Ht., C.I., M.S.C. is a Multiple award-winning hypnotherapist and musician. Peter has been deeply involved in researching altered states of consciousness, and the effects of music and sound for inducing trance since the mid-eighties. His Sounds for Healing meditational events have been featured at numerous hypnosis conferences, churches, and other sacred sites (including a presentation at the United Nations). He is the author of "TranceSonics - The Vital Link Between Sound Healing and Hypnosis" (2018),

and "What Is Your B.S.? - Exploring Belief Systems Through Hypnosis and NLP" (2024). A schedule of his activities can be found on his website trancesonics.com. He can be reached at peterlblum108@gmail.com



Kent Nelson, DMA, is a retired junior high music teacher who has received a number of awards for his outstanding teaching. He received his doctorate degree from Boston University in music education, master's degree from the University of Cincinnati in performance, and bachelor's degree from the University of Utah in music education. He served as principal trombone for Ballet West for over 20 years and was an adjunct professor at Weber State University for ten years. Attending the Classical Music Festival in Eisenstadt, Austria for seven years, Dr. Nelson was principal trombone in the orchestra. Dr. Nelson was conductor of Granite Junior Youth Symphony for over 30 years

and is currently conductor/music director of the Davis County Celebration Orchestra. He continues to perform in area orchestras and jazz bands. Besides presenting at three ISQRMM conferences, he was on a panel discussion at the International Symposium on the Sociology in Music Education (2011) at Michigan State University, guest lectured at Jackson State University (2012), and at the Colorado Music Education Conference (2017) he presented his research on dyslexia and music. Dr. Nelson's dissertation titled *Successful Strategies of Individuals in the Field of Music* is often cited by other researchers. He is very proud of the advice he has been able to give individuals with dyslexia around the world who have contacted him via email. Dr. Nelson is honored to serve on the board of ISQRMM for the last four years in addition to being their journal's editor. He can be reached at kentpnelson@yahoo.com



Theresa Ellis, LMT is the owner of <u>The Healing Tree</u>, a Music & Wellness Clinic, Eden, UT. She is a practitioner/violinist performing artist who provides therapeutic massage, energy work, and harmonic services by working with balancing wellness frequencies. LinkinBio: https://beacons.ai/theresaellis and www.SYNKOFA.com playing Celtic Jazz tuned A=432Hz. Theresa holds a Bachelor of Music in Violin Performance from University of Utah. She has over 50 year experience with Detroit Motown recording sections and Nashville's recording sections including solo fiddling at the Grand Ole Opry. Her ensembles played before His Holiness Dalai Lama and famous attendees at Mitt Romney's Farewell to Olympics (2022). Her music production includes an Album Recordings and printed CDs as Solo, String Section Player and Music Arranger – Ellis & Franklin "Traveler" (1994), Eric McKenna "Dry Spell" (2021), many others. Theresa is the author of "String Masters – A Progressive Method for the Contemporary String Player", (Level I) for

Violin, Viola, Cello, Companion Guitar accompaniment. Theresa Ellis has *lived experience* working alongside fine arts and seeing the effects of special frequencies and sound broadcast performances. She and her late husband had success using frequencies to help two adopted brothers, unfortunate offspring from parents of substance abuse. It helped manage neural, behavioral, and physical ailments. Currently raising a grandchild she's a single, new, elder/mother. She can be reached at theresa.ellis27@gmail.com



A. True Ott, PhD is the Founder of Mother Earth Minerals, Ogden, UT. He holds a Bachelor of Arts - Business Administration/Accounting from Southern Utah University and a Doctor of Philosophy in Nutrition from American College, Washington, DC where his Dissertation and area of research focused on the field of mineral nutrition and applied bio-chemical mineral reactions and processes with Hydrogen (H+) on the cellular level.

The human body is composed of certain earth-based minerals and water, so any correct nutritional program must of necessity incorporate these substances for healing and/or the elimination of disease states. He is the author of Wellness Secrets of Life, Secret Assassins in Food and has given many public lectures and presentations in person and via radio. He can be reached at atrueott@msn.com



Carla Rose Kelly is a 12-time Global Music Award winning composer and performer in the Healing, Meditation, Music Medicine, Ambient and Lullaby categories. She is the first in the world to win in the new category of Music Medicine. Carla has professionally recorded and categorized playlists of new Music Medicine to help heal a multitude of physical and emotional/mental disorders that are available on the app: Music Medicine. It also includes new nursery rhymes that she wrote specifically to empower the developing brain based on her research. She is a retired Royal Conservatory of Music piano teacher evolving into Music Medicine research in 2007. She presently has 4 published research papers with the ISQRMM and ISME. She has had the privilege of speaking internationally about her research in Music Medicine, hosting workshops and classes in Japan, England, Norway,

Canada and across the USA. She holds 4 patents in Canada, USA and Japan, inventing the first new healing instruments with the Solfeggio SACRED SCALE® including her methodology to heal. For 25 years, Carla has a private practice as a Music Medicine Specialist, where she offers individual and group healing sessions. She teaches her Music Medicine methodology online and in person. This patented Music Medicine program bridges the latest research across multi-disciplinary fields in the Science of Sound with Spirituality, Music Medicine, Psychology, Neuroscience, Numerology, Neurobiology, and Neurotheology. It encompasses a beautiful connection of how profoundly powerful music can be for healing. Carla Rose Kelly is playwright, co-composer and producer of the 2018 musical, Let the Music Come Alive. It is a new Canadian musical telling the tale of how a young girl uses music to help her father's heart heal. This musical hosts three Global Music Award winning songs. In 2020, she published her first book, Down & Dirty Emotional Healing, outlining a simple 3 step program that anyone can use to help heal their emotions using Music Medicine. In 2025, Carla launched her podcast Healing with Music Medicine, to help educate and offer healing music to others. www.Music-Medicine.ca She can be reached at info@CarlaRoseKelly.com



Aramat Arnheim-Sharon is a singer and voice instructor, currently based in Israel. Author of "LEV - Learn to Evaluate Voice" that will soon be released in English, Founder of the Israeli Voice Association (organization for voice professionals from the medical fields and the arts). She is one of the first 14 recognized vocologists world wide by PAVA (PAVA-RV) and certified vocologist (National center for voice and speech). She holds diplomas from multiple vocal techniques and is currently working on her MA in voice pedagogy. She developed teacher training programs for some of the organizations she served and developed her own teacher

training program that is high in demand - LEV course. Aramat has presented in voice events in the US, UK and Canada (PAVA, Voice Foundation, ViP) and has produced international and local events, online or physical, for singers and voice professionals. Aramat's main styles of teaching include CCM and Musical Theater. She is known for her empowering and welcoming approach, but is committed to science, research and excellence both from her students and from herself. Among many collaborations, she established the PAVA chapter in Israel (Pan American Vocology Association). She was Education Director for 3 years and an active board member for "VIP – Vocology in Practice". This is after a couple of years representing "IVA – Institute for Vocal Advancement" and she spent almost 7 years of certifications in "SLS -Speech Level Singing". Aramat also trained in various courses of different methods such as Estill, Laryngeal Manipulation and many more. She can be reached at aramat@aramat.co.il



Brian Manternach, DMus (he/him), is an associate professor in the University of Utah Department of Theatre and a research associate at the Utah Center for Vocology, where he is on the faculty of the Summer Vocology Institute. Honors include the Distinguished Teaching Award from the University of Utah, Teacher of the Year Award from the Cal-Western Region of the National Association of Teachers of Singing (NATS), NATS Clifton Ware Group-Voice Pedagogy Award, Faculty Excellence in Research Award from the University of Utah College of Fine Arts, and the NATS Foundation Voice Pedagogy Award. He has presented research at national and international conferences for NATS, the Pan American Vocology Association, and the Voice. He can be reached at brian.manternach@utah.edu



Baritone André Chiang has been described as "vocally commanding" (Oregonian), "handsome of voice" (Opera News), and lauded with "let's hear more from this singer" (Washington Post). Chiang's engagements include Ping (Turandot) with OperaDelaware, Marcello (La bohème) and Artist Martinez/Ecce Homo (Behold the Man - world premiere) with Opera Las Vegas, and Escamillo (Carmen) with Opera Western Reserve. Chiang has also been seen with the Glimmerglass Festival, Opera Theatre of Saint Louis, Opera Philadelphia,

the Atlanta Opera, Portland Opera, Virginia Opera, New Orleans Opera, Opera Las Vegas, Mobile Opera, and other American opera companies. As an educator, Chiang was a 2018 NATS Intern and in the first cohort of Pan American Vocology Association – Recognized Vocologists (PAVA-RV). Chiang is an Assistant Professor of Voice at Emory University, an Instructor of Voice at the Interlochen Summer Arts Camp, and runs a private online and in-person studio teaching acoustic and amplified styles. www.andrechiangbaritone.com



Beth Falcone is a New York City-based pianist, conductor, composer-lyricist, and SVI-trained vocologist. A Kleban Prize Winner for Most Promising Lyricist in American Musical Theater, she is best known as the composer-lyricist for the Off Broadway musical Wanda's World, which earned Lortel (best musical) and Drama Desk (best book) nominations. Beth recently music-directed the Off-Broadway premiere of Welcome to the Big Dipper with its original cast album set for release in 2025. Other credits include Broadway's Lion King, Les Miserables,Fame Becomes Me. Off Broadway: Unexpected Joy, Like You Like It, Hollywood Pinafore. She performs regularly with the Bob Malone Band and the duo Cool Parlour. Beth has developed a pitch-matching method for those who

believe they are tone-deaf and given workshops at Voice Foundation, PAVA, and at various schools internationally. She is on the voice faculty at New York Film Academy, moderates for the VoiceCare BookClub, and serves on the boards of PAVA and the Human Compatible Learning Center. BethFalcone.com



Amanda Stark, PhD, CCC-SLP, is a research scientist in the Voice, Airway, Swallowing Translational (VAST) Research Lab at the University of Utah. She specializes in the evaluation and treatment of neurogenic voice disorders, supraglottal sound sources, and upper airway disorders. With a robust clinical background and a passion for advancing the field, Dr. Stark integrates her research interests with her clinical practice to provide innovative solutions for patients facing complex communication challenges. Her work encompasses clinical expertise and rigorous scientific inquiry, allowing her to contribute valuable insights into the mechanisms underlying voice disorders and their rehabilitation. Dr. Stark's contributions to her field have been recognized through numerous publications in peer-reviewed journals and presentations at national and international conferences. She advocates for interdisciplinary collaboration, working closely with other healthcare professionals to

provide comprehensive care for her patients



Lynn Maxfield, PhD, is the director of the Utah Center for Vocology at the University of Utah where, in addition to research activities, he coordinates and teaches at the Summer Vocology Institute. He is also an associate professor (lecturer) in the University of Utah School of Music, where he teaches courses in voice pedagogy and vocology. In addition, he serves as a vocal coach for the University of Utah Voice Disorders Center, where he provides patients habilitative voice coaching in coordination with the medical team, both during and following medical treatment. He currently serves as an associate editor of the Journal of Singing, overseeing the "Mindful Voice" column, and as an ad-hoc peer reviewer for Folia Phoniatrica, Journal of the Acoustical Society of America, and the

Journal of Voice. He holds a PhD in voice pedagogy and an MA in voice performance, both from the University of Iowa. He can be reached at lynn.maxfield@utah.edu



Sarah McDowell is a Speech Language Pathologist and Research Associate at the University of Utah Department of Otolaryngology-Head and Neck Surgery. She completed her clinical fellowship at the University of Utah's Voice Disorders Center, where she specialized in voice, upper airway, and swallowing disorders. Sarah earned her Master of Science in Speech Pathology from the University of Texas at Dallas and holds a Bachelor of Music in Vocal Performance from the University of North Texas and a Bachelor of Science in Communication Disorders from Utah State University. In addition, Sarah completed the Summer Vocology Institute in 2021 and is an active member of ASHA SIG 03.



Brad Story, PhD, is Professor in Speech, Language, and Hearing Sciences and Associate Dean of Faculty Affairs in the College of Science at the University of Arizona. Dr. Story received his PhD in Speech and Hearing Sciences from the University of Iowa in 1995. Dr. Story's research publications concern the mechanics, aerodynamics, and acoustics of speech production, as well as the perception of speech sounds. Dr. Story has served as Associate Editor for the Journal of the Acoustical Society of America, is a fellow of the Acoustical Society of America, and recipient of the Rossing Prize in Acoustics Education in 2016. Dr. Story was recognized by the American Speech Language and Hearing Association in 2013 with the Zemlin Award, and by the University of Iowa in 2018 with a

Distinguished Alum Award. His research has been supported by the National Institutes of Health and the National Science Foundation. Foundation, among others, and was a featured speaker for TEDxSaltLakeCity. His book, Voices of Influence: Exploring the Journey of a Teacher and Student in the Voice Studio (Rowman & Littlefield) will be published in 2025.



Ingo R. Titze holds degrees in physics (PhD), electrical engineering (MSEE), and music (vocology). For 34 years, he has directed the National Center for Voice and Speech. Currently, he is a Senior Scientist at the Utah Center for Vocology and an Adjunct Professor in Otolaryngology, Biomedical Engineering, and Music at the University of Utah. He is a founding member of the Pan-American Vocology Association and served as their first elected President. In addition to his research work, he continues to teach Principles of Voice Production at the renown Summer Vocology Institute, which he founded over 25 years ago. Dr. Titze also serves as Emeritus Distinguished Professor at the University of Iowa, is a Gold (2024) and Silver (2007) Medal recipient from the Acoustical Society of America and received the Gould Award for outstanding research in laryngeal physiology (1984). He has

authored five books, edited three, and published over 500 journal articles.



Elizabeth Zharoff is an American YouTuber, video game sound designer, and opera singer. Mrs. Zharoff earned a bachelor's degree in vocal performance from the Oberlin Conservatory of Music and a Master of Music from the Curtis Institute of Music. After largely putting her operatic career on hold, she devoted herself to the topics of voice and singing on her YouTube channel, "The Charismatic Voice". She works primarily as a voice coach, singer, and arranger of video game soundtracks. She also interviews rock vocalists. As of June 2024, her YouTube channel has over 402 million views and over 1.84 million subscribers.

William (Will) Ramos is an American singer and lead vocalist of the deathcore band Lorna Shore.





Mark Johnston, MD is a physician and medical researcher with more than 30 years of experience in clinical care and medical research. He has been an investigator for over 100 clinical trials including Alzheimer's Dementia studies, and research into Parkinson's disease, depression, anxiety, and pain as well as investigations of new medication for these conditions and other central nervous system disorders. He is a Diplomate of the American Board of Psychiatry and Neurology and a respected leader in his profession having served as President of the Utah Psychiatric Association and Chair of the

Members-In-Training Committee for the American Psychiatric Association. In addition, he has been Chairman of the Alzheimer's Association of Utah, Chairman of the Board for the University of Utah Medical Alumni Association as well as a board member of the MS Society of Utah. Dr. Johnston made a difficult life decision in college choosing to pursue a career in medicine rather than one in music. Dr. Johnston has always loved music and had a fascination for its ability to communicate emotion and ideas beyond what words offer us. He has also followed with great interest the growing knowledge of the brain and the unique effects of music on brain function and emotion. Dr. Johnston is an accomplished musician and has played trombone since the age of ten. He is currently the Principal Trombonist for the Timpanogos Symphony and a member of the Salt Lake CityJazz Band and Millennial Orchestra. He has played as a member of the Salt Lake Symphony, American West Symphony and Glacier Symphony and is a co-founder of the Olympus Brass Quintet. He can be reached at drmjohnston@gmail.com



Honduran baritone, **James D. Rodriguez**, has appeared in operatic works by Bizet, Rossini, Mozart, Donizetti, Strauss, Verdi, Catán, and many others. Favorite roles include Figaro in *Il barbiere di Siviglia*, Tonio in *Pagliacci*, Dr. Rappaccini in *La Hija de Rappaccini*, Herr Fanninal in *Der Rosenkavalier*, and the title roles in *Rigoletto* and *Falstaff*, the latter which he performed with the TCU Opera and Symphony Orchestra. Other appearances include those with Des Moines Metro Opera, Opera in the Heights, Utah Festival Opera & Musical Theatre, Opera Theatre Pittsburgh, the Natchez Festival of Music, and the Moores Opera Center. Concert appearances include Beethoven's *9th Symphony & Mass in C*, Fauré's *Requiem*, Handel's *Messiah*, Carlisle Floyd's *Pilgrimage*, Mahler's *Lieder eines fahrenden Gesellen*, *Goodall's Eternal Light: A Requiem*, and Rossini's *Petite Messe Solennelle* with the Houston Camerata, Fort Bend Symphony, and San Antonio Symphony, among others. An avid collaborator, he has performed recitals with PianoTexas Festival

with Dr. Michael Bukhman, the Festival of American Song with Dr. Cecilia Lo-Chien Kao (with composer Libby Larsen in residency), Opus Nova, Mt. Vernon Music, and Austin Chamber Music Center, for which he was awarded an Austin Critics Table Award for his participation in "Black Composers Concert: The Black Female Composer", with pianist, Dr. Artina McCain. In addition, he has performed as part of a trio with Drs. McCain and Alfred, touring the works of Black Female Composers as part of a recital series throughout the United States. In 2024, he sang as part of the Mahogany Chamber Music Series at the Crosstown Theater in Memphis, Tennessee and premiered *COLOSSUS: Mother of Exiles* by Christopher Aspaas with the TCU Concert Chorale. He is also the recipient of the gold medal in the Young Texas Artists Vocal Competition. Dr. Rodriguez is an Associate Professor of Voice & Voice Pedagogy at Texas Christian University (Fort Worth, TX), and has presented his research at conferences through the National Association of Teachers of Singing, The Voice Foundation, the Pan American Vocology Association, and many others. He holds advanced degrees from the University of Houston and is a Certified Vocologist from the National Center for Voice and Speech. Dr. James Rodriguez can be reached at JAMES.RODRIGUEZ@tcu.edu



Katie Lahue, MA, SCMT, MT-BC, CMHC is a board-certified music therapist and clinical mental health counselor. Katie currently serves as the Expressive Therapies Manager at Primary Children's overseeing all expressive therapies programs for children's health including music therapy, art therapy, dance/movement therapy, and rec therapy. Katie completed her bachelor's degree in music therapy and music education and her master's degree in music therapy and counseling. Katie has practiced music therapy in a variety of

clinical settings but has spent the past 7 years in the pediatric medical setting. Katie has published a Handful of papers and research in music therapy. She is currently teaching Principles and Practices of Music Therapy at the University of Utah. She can be reached at Katie.Lahue@imail.org



Sara Langenberger (she/her) is a board-certified music therapist who currently serves the pediatric hematology/oncology unit, as well as an inpatient medical-surgical unit, at Primary Children's Hospital. Sara joined the music therapy team at Primary Children's in 2022 after working at the University of Iowa Stead Family Children's Hospital. Sara graduated from Saint Mary-of-the-Woods College in 2020 with her Bachelor's Degree (BS) in music therapy and in 2023 with her Master's Degree (MA) in music therapy. Sara is a featured author in the book *Portraits of Everyday Practice in Music Therapy*, and has a passion for trauma-informed and patient-centered care.



Emily Polichette, MM, SCMT, MT-BC, is a Neurologic Music Therapist and Program Specialist at the University of Utah Huntsman Mental Health Institute (HMHI). Emily studied at Colorado State University and has over two decades of experience in music therapy, including 15 years specializing in mental health care. They also serve as the Internship Director for clinical music therapy training at HMHI. Emily has been actively involved in music therapy policy and advocacy, working to increase regulation, expand access to services, and develop the workforce. They have presented nationally on topics that bridge neuroscience research with music therapy practice. As a faculty member of the Arts & Health Innovation Lab at the University of Utah, Emily contributes as a content expert. Their collaborative research projects focus on examining the physiological markers and impact of music

engagement on resilience and agency following trauma. She can be reached at Emily.polichette@hsc.utah.edu



Eliana Rivera, MT-BC, graduated from Appalachian State University with a Bachelor of Music Therapy in 2017 and has worked at Primary Children's Hospital for over 7 years. She ran groups at Primary Children's Wasatch Canyons Mental and Behavioral Health campus during that time before transitioning to working full time in 2024 at Primary Children's Hospital campus in SLC. Eliana covers all inpatient units at the hospital and is the lead for the cardiac intensive care unit and cardiac care unit. Eliana comes from a humanistic approach and incorporates trauma informed care.



Kimberly Gratland James, DM, is an active operatic and symphonic performer and serves as an associate professor at the University of Nevada, Las Vegas (UNLV) School of Music where she teaches applied voice; she has taught courses in voice pedagogy and diction at all academic levels. James made her Lincoln Center debut in Adams' *Grand Pianola Music* with the London Sinfonietta. She recently performed in the Dallas Symphony's *Ring* production and regularly performs Beethoven, Verdi, and Mahler masterworks with orchestras across the U.S. In 2008, she earned a vocology certificate from the National Center for Voice and Speech, fueling her

interest in the science of singing. Currently, she is researching ways to measure tissue viscosity in organs while vocalizing and learning new research techniques for the rapidly changing landscape influenced by AI. Dr. James holds the following degrees: DM (Indiana University), MM (Rice University), BS (Texas Christian University).



Juliana Azoubel, MA is a Brazilian Dance artist, teacher, researcher who has been sharing her life between Brazil and the US since 1996. In Brazil, besides her extensive dance training, teaching and performance experiences, Professor Azoubel has served as a Professor of Dance and Head of the Art/Education Department of the Federal University of Parana, from 2009-2013 and has been a Professor of Dance at the Federal University of Minas Gerais since 2014. In Minas Gerais, she has served as a teacher/lecturer at the School of Grupo Corpo from 2015 to present and the Artistic Director of Grupo Aruanda, two of the most renowned Dance Companies in Brazil. Professor Azoubel is currently a Fellow and PhD Candidate while teaching and

researching for Texas Woman's University Dance Division and for the Federal University of Minas Gerais. Professor Azoubel holds a BFA in Dance and an MA in Latin American Studies (University of Florida) and is a Stott Pilates and TAO Pilates Master Instructor. She has served multiple times as an artist in residence at the University of Florida and has performed in the US, in Europe and South America. Her interests blend Dance ethnography, traditional and contemporary dance, social, cultural, pedagogical, community, diasporic, intercultural performance, feminist approaches, migration and Latine aspects of dance making. Trained in Ballet, Jazz, Modern, Contemporary, Latine and Ballroom, and having mastered several Brazilian dance forms, Professor. Azoubel believes in the interconnection of artistry, teaching, and research as well as in the power of interdisciplinarity as tools for dance making. Professor Azoubel has published academic articles and books, and her scholarship is present in Elementary, Middle, and High School, and Young Adult and High Education. In Brazil and abroad, her writings have contributed to decolonizing curricular and intercultural practices, and interconnecting artistry, pedagogy, healing practices, and dance scholarship. Professor Azoubel is one of the creators of the Centro de Formação em Danca do SESC, a dance community project housed in the city of Belo Horizonte that serves as a national model for inclusion and diversity in Dance in Brazil. In her current stay in the United States, since 2019, she has been the recipient of important awards and prizes including the Langston Dance Fellowship, Dance scholarships at TWU and Texas Education Grants. She has also created the Dancing Eagles, a performance Ensemble housed at Evers Park Elementary School, for kids from K-12. In Brazil and internationally, she has been recognized for her committed scholarship towards intercultural performance and creative and healing ways of teaching dance to all ages, abilities, and communities. She can be reached at jazoubel@twu.edu



Ana Paul is a Romanian-American 19-year-old musician currently based in Long Island, New York. During her formative years she attended the German International School of New York in Westchester, where she learned German fluently and received her DSD-II certification, making her trilingual. She attended Fiorello H. LaGuardia High School as a vocal major and released her first album, *Lady Moon*, in 2020 at age 16. Ever since then she has been releasing music on streaming platforms each year, composing all of her own songs and lyrics, recording and producing several of them by herself. She also studied Hypnosis and received her certification in 2021. She is currently studying Psychology on a pre-med track at the University at Buffalo. She anapaul3756@gmail.com



Steve Cho is an MD/PhD student at the University of Utah and co-founder and president of the Utah Medical Orchestra, a community ensemble comprised of healthcare workers in Salt Lake City. Steve received an A.B. in Music Theory & Composition and Biology from Bowdoin College and currently studies host-pathogen co-evolution in the lab of Nels Elde.



Tom Hurtado, EdD is the Senior Director of Student Affairs and Professional Identity Formation at the Spencer Fox Eccles School of Medicine, University of Utah. He co-directs the Professional Identity Formation curriculum and RealMD, and co-leads the AAMC's national RISE leadership conference. Dr. Hurtado holds degrees from the University of Utah and the University of Southern California.



Yazmin Marin is a graduate student in the Learning and Cognition program at the University of Utah. Her research focuses on cognitive processes in reading comprehension, with particular emphasis on how linguistic factors influence cognition and perceptions. Yazmin explores the intersection of knowledge and identity within educational contexts, examining how these factors shape learning and understanding. She is committed to advancing research that bridges gaps in education and promotes equitable teaching practices.

Musicians



Carla Rose Kelly is a 12-time Global Music Award winning composer and performer in the Healing, Meditation, Music Medicine, Ambient and Lullaby categories. She is the first in the world to win in the new category of Music Medicine. Carla has professionally recorded and categorized playlists of new Music Medicine to help heal a multitude of physical and emotional/mental disorders that are available on the app: Music Medicine. It also includes new nursery rhymes that she wrote specifically to empower the developing brain based on her research. She is a published researcher, international speaker in Music Medicine, and has hosted workshops and classes in Japan, England, Norway, Canada and across the USA. On a daily basis, she has a private practice in MM. In 2025, Carla launched her podcast Healing with Music Medicine, to help educate and offer healing music to others. For more information you can reach Carla Rose at www.Music-Medicine.ca and info@CarlaRoseKelly.com



Ana Paul is a Singer-Songwriter based both in Port Washington and Buffalo, New York. Her original music, which she has been writing for seven years, reminds listeners of Joni Mitchell and Folk music of the 1960's, as she likes to keep an acoustic sound. In 2020, at the age of 16, she released her first album of all original songs titled "Lady Moon." She attended Fiorello H. LaGuardia High School of Music and Arts where she majored in Vocal music studies. Ana has played at various venues throughout upstate New York, Long Island and New York City. She continues to work on her music while pursuing a College degree in Psychology. Ana also founded the Undergraduate Poetry Club at the University at Buffalo, and has hosted Poetry readings at Hallwalls in Buffalo, New York. Her involvement in the Media Study Department at her University has piqued her interest in video production and visual arts. She continues to explore her childhood passions of drawing, painting and photography. She can be reached at anapaul3756@gmail.com

SYNK®FA



Celtic The Jazz ensemble SYNKOFA builds upon innovative folk song arrangements of violinist Theresa Ellis and adds the original compositions of guitarist Eric McKenna. The four-piece instrumental band features soloist extraordinaire Steve Wesson on the

upright bass and the skillful violin and viola lines of their newest member Mary Otterstrom. Together, they play Celtic and world-roots music with a Gypsy flair. Each member bestows instrumental proficiency as though it were a solar flare upon the material. Upright bassist Stephen Wesson, equally competent with fingers or a bow, traverses syncopated lead lines to deep sustained tones while holding down the groove. Mary Otterstrom, Maestra viola/violinist, captivates audiences with her passionate delivery showcasing both the violin and lyrical beauty of the viola. Guitarist Eric McKenna artfully employs harmonics and pull-offs with rasgueado flamenco strums to craft his chords and solos. Masterful techniques underpin fiery leads and stirring melodies by violinist Theresa Ellis. A distinctive feature of the group is their employment of "Verdi" or "Pythagorean" tuning of A to 432Hz. Historically prevalent and sonically organic, the 432 tuning is designed to speak to your soul and sync with universal vibrations! They like tuning to the perfect arithmetic to promote the most perfect healing scenario possible. Join SYNKOFA for a healing journey of surprising twists on traditional Irish and Scottish melodies and rhythms that define the Celtic Jazz genre and beyond. www.synkofa.com

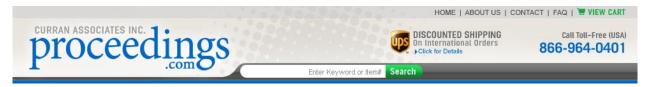


Nino Reyos, a member of the Northern Ute and Laguna Pueblo Indian Nations, holds a Master's degree in Social Work and works as a Substance Abuse Therapist. He is the only member of his family to attain higher education and is also a Native American veteran, honorably discharged from the U.S. Marine Corps. A Northern Traditional Dancer, Nino carries on the warrior tradition by wearing eagle bustles. As a cultural presenter, he educates audiences on Native American traditions, substance abuse prevention, and musical healing. Sober since 1985, he integrates his heritage into teaching indigenous crafts, dance, storytelling, and flute playing, influencing both indigenous and non-indigenous communities. Nino has performed

across the U.S., including at the Indian Summer Gathering in Milwaukee, and has collaborated with artists such as Douglas Spotted Eagle, Bill Miller, R. Carlos Nakai, and Jim Bilagody. He was one of five flute players selected for the 2002 Winter Olympic Games Opening Ceremonies in Salt Lake City and also performed at the 2007 Deaflympics. His third CD, released in 2004, won an International Telly Award and received a Native American Music Award nomination. He is also a former voting member of the Grammy Awards.

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