Moments of extreme stress, both eustress and distress, tax the mind and body. This presentation explores music therapy and music-based interventions to support coping, stress management, and well-being. The disaster support programs of music therapists are highlighted with references to research.

**Economics of a Hospital-Based Music Program**
J. Todd Frazier
Successfully communicating the value of hospital-based music programs to healthcare leadership and philanthropic interests creates clear and shared understanding of program benefits. This talk explores the comprehensive program model of the Center for Performing Arts Medicine, including divisions of musician’s healthcare, music integration, music therapy, research, and outreach. Of special focus will be a review of successful tracking models used and methods of communicating value to hospital leadership, thereby elevating the necessity and permanence of such programs. Assessment measures and outcomes discussed will include, HCAPHS scores (Patient Satisfaction scores), Employee Satisfaction scores, Supply Chain Cost, Length of Stay, Patient Outcomes, and Readmissions.

**Songs by Heart: the unforgettable joy of making music**
Nancy Gustafson, MM
Three and a half years ago, music helped Nancy Gustafson reconnect with her mother, Susan. Susan had Advanced Alzheimer's Disease and had lost the ability to communicate. Nancy, a world renowned opera singer, became committed to bringing engagement-centered music programs to her mother and to dementia sufferers all over the country and Songs by Heart was born. Join Nancy as she shares her mother's story and the stories of hundreds of other families whose lives have been touched and changed by Songs by Heart... and make sure that you've warmed up your voice because Songs by Heart singers will be there too to show you first-hand what it's like to attend a Songs by Heart program!
Music and Brain Health
Nina Kraus, Ph.D.
Science tells us that participating in the making of music creates pervasive structural and functional changes in the brain and confers cognitive advantages and academic benefits. In parallel with these findings, the practice of music therapy is growing and with its growth, it is gaining widespread acceptance as a successful intervention. The success of music therapy is likely due in part to the ability of sound—the basis of music—to deeply engage sensorimotor, cognitive and reward systems in the brain. I am going to talk about our current understanding of the effect of musical experience on the nervous system, and how it informs our understanding of the success of music therapy. And I will address the gaps that remain. It is my goal that this conference assemble people like me, who approach the study of music from a basic science background and people like many of our other panelists who come from a clinical perspective to begin to bridge these gaps and move our understanding of music’s role in health to the next level.

Music Therapy and Autism
Blythe LaGasse, Ph.D., MT-BC
A musical interaction captures the attention of a child on the autism spectrum; he is playing a marimba while a music therapist facilitates the interaction on the piano. The child is looking at the music therapist, he is saying “more” when the therapist pauses, and he is expressing joy through affect and vocalizations. In this experience, the child has the opportunity to work on social communication and joint engagement. Music therapy offers unique opportunities for children with autism spectrum disorder to develop non-musical skills. Research supports the use of music therapy for children with autism spectrum disorder, with a 2014 Cochrane review showing evidence for gains in social communication, initiating behaviors, and socio-emotional reciprocity. Research has also revealed that persons with autism spectrum disorder have unique strengths in music processing, allowing music therapists to build on these strengths to facilitate positive outcomes. This presentation includes demonstrations and will focus on music therapy for children on the autism spectrum.

Making the Pieces Fit: Music Therapy in a Medical Culture
Deforia Lane, Ph.D.
Experience the making of a three decades young Music Therapy program in a major Midwest teaching hospital. Explore the research & metrics, those unexplainable aha moments and experience how music can benefit you in your work and beyond. Observe on the silver screen patients and staff in action and engage first-hand in the rousing and poignant effects of music-making!
The Military, Music, and the Road to Recovery
Moira McGuire, CAPT USPHS DHA WRNMMC (US)
This session will discuss the history of music in the military, from its original use for signals and timekeeping, to its expansion into morale and esprit des corps activities, to its role in the development of the field of Music Therapy, and finally to its current day use and application. Participants will learn how music, and music therapy, is being used to help battle-injured service members with TBI (traumatic brain injury including concussion), PTSD (post-traumatic stress disorder) and other psychological health issues; to address and positively impact resilience, readiness and reintegration; and ultimately its role in ensuring the overall health & wellness of service members, their families, retirees and Veterans.

Music and Movement Disorders: Spotlight on Parkinson’s Disease
Elizabeth Stegemöller, Ph.D.
There is more to moving to music besides dancing! Moving to music, whether dancing or singing, has been shown to be a powerful tool to improve the lives of people with Parkinson’s disease. This session will explore why music therapy works from a neuroplasticity perspective while including examples and research from neuroscience, music therapy, and Parkinson’s disease. Results from research using singing in Parkinson's disease will be discussed, as well as future directions for the inclusion of music therapy for this population and other movement disorders.

Advances in Music Therapy: Well – tuned to Enhance Human Development, Recovery and Health
Concetta Tomaino
Established as a profession in 1950, the field of music therapy has gained prominence in recent years as advances in neuroscience provide new understanding of how and why music and the components of music are effective clinical interventions. Evidence based music interventions and music therapy models have emerged as best practice allowing for advanced training especially in areas of neuro rehab, autism, neonatal care, and oncology. This presentation will provide an overview of these advances along with clinical examples.