

Progress Report

# Building the Neuroarts Field 2022–2023

Community, Action, Progress

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# NeuroArts Blueprint

Advancing the Science of Arts, Health, and Wellbeing



LETTER FROM CODIRECTORS

Dear Neuroarts Community:

We are delighted to present this update on the NeuroArts Blueprint initiative, which highlights our recent progress and future plans. The year since publishing the NeuroArts Blueprint in December 2021 has been remarkably vigorous and productive. Together, we have made important strides in our collective commitment to implement the recommendations and action steps outlined in that foundational document.

Neuroarts has captured the attention of an expanding network of researchers, practitioners, arts groups, health providers, and other public sector and private sector organizations. Although their mission, staffing, constituencies, and resources differ greatly, these stakeholders are united by their common understanding that the arts have an essential role to play in the pursuit of health and wellbeing. We are honored to serve as a hub to share the growing body of practice experience and research findings they are generating, and to act as a catalyst to inspire more.

As you will read here, we are moving rapidly on a near-term agenda framed around three core goals: building infrastructure, building community, and building evidence. A Neuroarts Resource Center will anchor the field, with a vast interactive database designed to foster networking and the exchange of information. We are also commissioning research to deepen knowledge about the power of the arts, helping to cultivate a network of diverse community neuroarts coalitions, establishing an academic research consortium, identifying public policies that will advance neuroarts, and spreading the word through webinars and other communications. The ultimate goal, of course, is to firmly establish the field of neuroarts and incorporate its work fully into mainstream medicine and public health.

Many opportunities to expand the field of neuroarts lie ahead, and we will need to raise additional resources to take full advantage of them. But the stage is set for transformative growth and we look forward to strengthening the partnerships that will make that possible.

Susan Magsamen / Ruth Katz  
Project Codirectors, NeuroArts Blueprint

February 2023



# Looking Back, Looking Forward

Under the umbrella of the NeuroArts Blueprint initiative, a growing community of dedicated individuals and organizations is coming together to cultivate the field of neuroarts.

**Neuroarts is the study of how the arts and aesthetic experiences measurably change the brain and body and how this knowledge is translated into practices that advance health and wellbeing.**

The arts can help people prevent, manage, and recover from physical and mental challenges. We've seen it stop tremors in Parkinson's disease and give voice to people who can not speak. The arts can return memories in the face of dementia, raise the spirits of those who are depressed, and lessen stress and inflammation by lowering cortisol levels. They can also foster the social cohesion that is so essential to community health.

A long-term vision for combining music, visual arts, design, dance, and other art forms with the proven rigor of mainstream medicine and public health is detailed in the [NeuroArts Blueprint: Advancing the Science of Arts, Health, and Wellbeing](#). Published in December 2021, this designed-for-impact roadmap is coalescing broad interest in an ecosystem at the crossroads of science, technology, the arts, health, and wellbeing.

As momentum accelerates, engaged stakeholders—in both the research and practice communities and across disciplines and sectors—are generating a foundation of evidence to inform clinical and community best practices. We recognize interdisciplinary collaborations as the core driver of success and see our role as stewarding the relationships that foster those collaborations.

Following the Blueprint's release, we began laying the groundwork for a Neuroarts Resource Center to serve as the anchor for the field, a common home to exchange knowledge and ideas and track neuroarts-related activities and evidence. It is a tangible demonstration of our fundamental operating principle: together we are unstoppable .





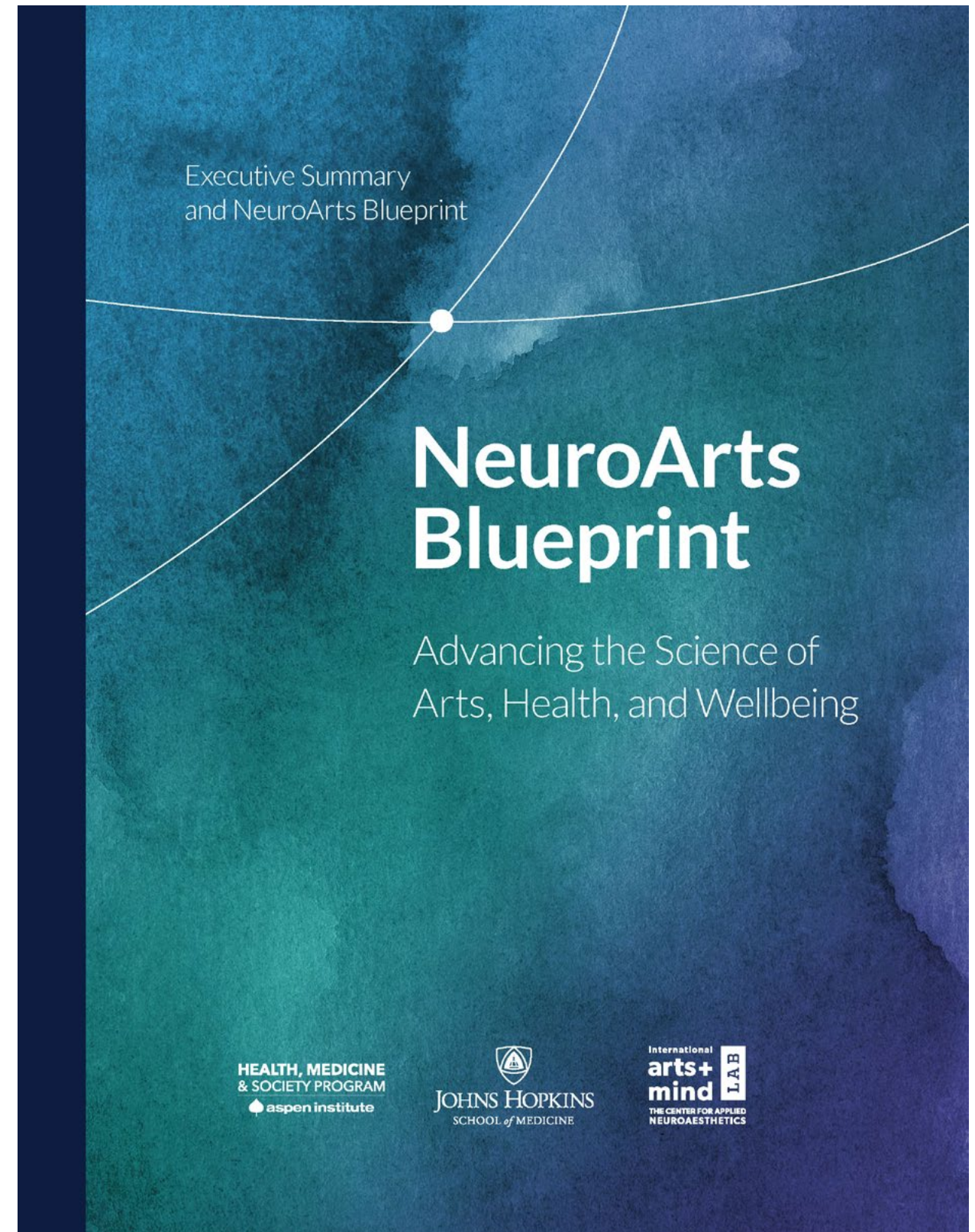
# Brief History

The Johns Hopkins International Arts + Mind Lab Center for Applied Neuroaesthetics (IAM Lab), with its deep bench of translational science and partnerships, and the Aspen Institute's Health, Medicine & Society Program (HMS), with its renowned convening and consensus-building power, are partners in the NeuroArts Blueprint initiative. Our highly synergistic collaboration began in 2019. Renée Fleming, celebrated soprano, arts and health advocate, and artistic advisor to the John F. Kennedy Center for the Performing Arts, and Eric Nestler, neuroscientist and dean of academic and scientific affairs at Mount Sinai Medical Center, cochair our Advisory Board.

Reflecting two years of research, in-depth stakeholder conversations, focus groups, and convenings, the NeuroArts Blueprint advances five principles, five findings, and five recommendations (see Appendix: Blueprint Principles, Findings, and Recommendations). Collaboration is at the heart of the enterprise, with strategies designed to pair academic knowledge and practitioner expertise, and to promote vigorous cross-disciplinary work.

The Blueprint was informed by a commissioned set of papers published in a companion volume. These include a point-in-time snapshot of the state of neuroarts, an economic analysis of engaging people with Alzheimer's disease in music, an online survey of diverse constituencies, and global examples of how arts-informed economic interventions can build health.

Sharing the NeuroArts Blueprint widely has been a key priority. Following its release, inquiries from across the country and around the world have flooded our offices. Moreover, the Blueprint has been downloaded more than 2,000 times since publication and we have recorded more than 16,000 visits to our website. Testimonials to the value of applying the arts to health and wellbeing, and the rewards of fostering community, continue to inspire and motivate our work.

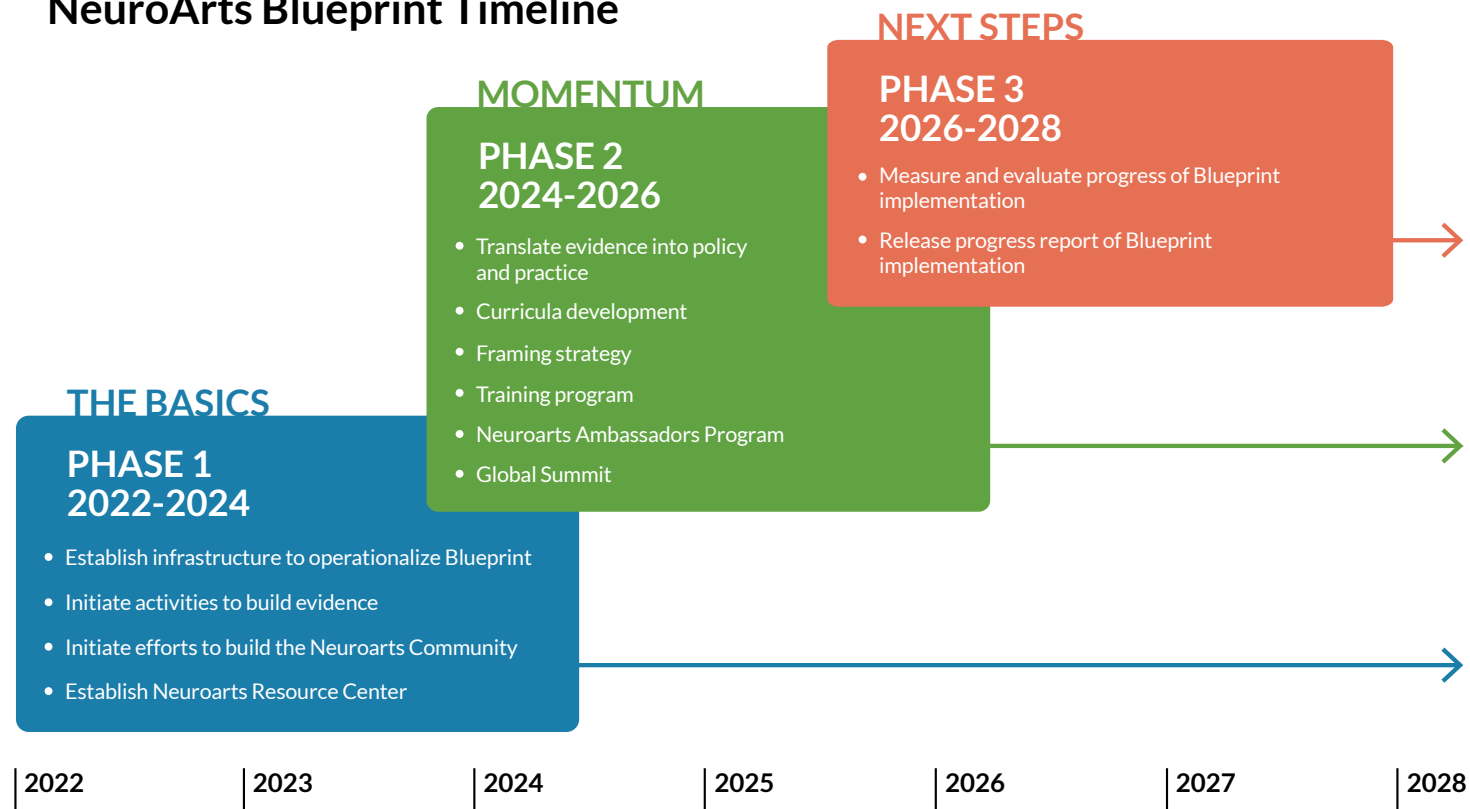


# Preparing for Implementation

During the first quarter of 2022, we developed a detailed implementation plan, accompanied by budget, funding and staffing estimates, that provides the structure for advancing the neuroarts field. The plan includes action steps, some sequential, some simultaneous, that will grow our community, define measures of success, and fuel forward motion. Early in the year, we also assembled a multisector Advisory Board to provide expert guidance and began planning for a Scientific Research Advisory Board to shape and guide evidence-building priorities. Virtual convenings are on tap to bring board members together.

The implementation plan unfolds in three two-year phases—putting the basics in place (phase 1: 2022-24), gathering momentum (phase 2: 2024-26), and evaluating progress to inform next steps (phase 3: 2026-28).

## NeuroArts Blueprint Timeline



## Three interrelated priorities drive the progress of each phase:

### **Building Infrastructure:**

A solid infrastructure supports the dynamic cross-disciplinary partnerships that are fundamental to a strong field—including evidence building, pioneering programs and practices, innovative policymaking, and educational and training pathways. In the early implementation phase, we need to erect the organizational scaffolding for a collective field-building enterprise. Mechanisms are also needed to align research and practice activities with the outlook and interests of policymakers and public and private sector funders, and to plant the seeds for secure and sustainable funding.

### **Building Community:**

A diverse, agile, and vibrant global community is the linchpin of efforts to coalesce and grow the neuroarts ecosystem. We need an all-hands-on-deck approach, with researchers, arts practitioners, artists, technology pioneers, local advocates, funders, policymakers, educators, clinicians, and individuals with lived experiences on board. Fostering a communications network that connects these stakeholders and cultivates new audiences is essential to make that happen. A seamlessly connected neuroarts community also engages high-profile influencers as ambassadors for the field, recognizes future-facing leaders, and awards innovation in ways that accelerate the work already underway across disciplines and sectors.

### **Building Evidence:**

The NeuroArts Blueprint envisions a role for traditional research designs, such as randomized clinical trials, as well as for community-based participatory research, economic analyses, qualitative narratives, and learning strategies that draw on the lived experiences of research subjects, arts practitioners, and the communities that will be served by the field. Clearly articulated outcome measures and reporting guidelines are essential to gather and make optimal use of rigorous evidence as it accumulates and to demonstrate the investment returns that will help attract funding, inform policy, and bring the arts into the mainstream of medicine and public health.



# Activity Highlights

The NeuroArts Blueprint partners have made significant progress in all three priority areas in phase one over the past year and plotted a strategy to move forward in the coming year.

## Key Activities

### **Neuroarts Resource Center:**

As the anchor for the NeuroArts Blueprint initiative, the Resource Center will be a vital asset for breaking down siloes and gathering together people across the globe. Development of this state-of-the-field resource is well underway, with an anticipated launch in 2023. It will include a vast, highly interactive, and continually updated compilation of neuroarts-related research, clinical findings, funding opportunities, organizations and agencies, convenings, and arts practices from around the world, in all art modalities and for all outcomes. We have begun the process of developing the in-depth practitioner and researcher asset maps to populate the Resource Center database, which will be fully searchable using the latest information technology.

Philanthropic investments, including from Google Arts & Culture and from the bedari collective, are providing both financial support and technical expertise. To ensure that the Resource Center meets the evolving needs of the neuroarts community, we are creating a technology advisory group and holding a series of conversations with end users and other stakeholders.

### **Research and Evidence:**

Research is a pillar of neuroarts, providing the robust evidence needed to enlarge the knowledge portfolio, inform arts-related practice, test community-building strategies, and offer tools that help support the field's many constituents. Evidence also informs our conversations with policymakers and funders whose backing is essential to accelerate the growth of the field. We have identified five priorities for the current research agenda—neurodegeneration, chronic illness, mental health, rehabilitation, and child development—and activities focused on each one are underway.

Our commissioned economic analyses spotlight our emphasis on neurodegeneration. [Alzheimer's Disease and Music Engagement Economic Impact Analysis](#), funded by AARP and conducted by KPMG, documented potential cost savings that can influence legislative decisions. With AARP and KPMG again participating, a follow-up True Value analysis will examine the impact of music on the quality of life of people with Alzheimer's disease, their families, and their caregivers. These studies are also examples of how we are designing research to inform policy change.

In further efforts to turn knowledge into action, we have identified topics for a set of white papers, including taxonomy and language of the field; the role of technology in neuroarts research and practice; opportunities to build transdisciplinary and inter-institutional collaborations; the development of research and outcome metrics to allow comparability and replication; and the use of art to address mental health challenges.

### **Capacity Building:**

To advance this and other work, we are developing plans for an Academic Research Consortium that will foster cross-disciplinary studies among global partners in medicine, public health, arts and health, cognitive science, psychology, and creative arts therapies, among other disciplines. Stanford University and Berklee School of Music have both initiated conversations with us about their leadership and participation in this consortium.

Building a global Community Neuroarts Coalitions Network is another area of emphasis. Straddling both evidence and community-building activities, these alliances allow local communities to convene health practitioners and groups, researchers, artists, academic and arts organizations for greater impact. Stakeholders in Boston, Kansas City, New York City, and West Palm Beach are testing the best ways to bring together players across disciplines and sectors in a shared space to expand the evidence base of neuroarts. We are following their work closely to identify best practices. The long-term goal is to develop a network of hundreds of local community arts-based health and wellbeing hives. In December, we held a webinar to present two models of coalition-building and describe opportunities to join a global movement.



**Communications:**

Effective outreach, framing, and targeted messaging are essential to spreading the word about neuroarts to diverse constituencies and building out an engaged community. As we promote the NeuroArts Blueprint, respond to the bubbling excitement about the field, and pursue consensus on the right language to talk about it, we are refining our communications strategy to reach diverse new audiences.

Across all of our communications activities is the recognition that words matter and need to be inclusive, compelling, and persuasive. Towards that goal, we have partnered with McCann Worldgroup to develop effective language and messaging that captures our strategic and creative mission and supports community-building. Going forward, this framework will inform all of our presentations, publications, fundraising, and dissemination efforts.

A [YouTube premiere](#) accompanying the release of the NeuroArts Blueprint garnered more than 3,500 views from around the world. To share knowledge and broaden our audiences, we have also presented the core elements of the Blueprint at numerous in-person and virtual convenings and cultivated earned media attention from national and specialty publications, newsletters, and email and social media announcements (see Appendix: Spreading the Word).

Throughout the year, the Blueprint initiative hosted a series of widely attended, public-facing webinars, including “[Community Neuroarts Coalitions: Building Healthier Communities through the Arts](#)” (December 14), “[Music and Dementia: The Economic Case](#)” (June 9), and “[A Plan to Build the Neuroarts Field](#)” (March 30). In addition, the National Organization for Arts in Health featured the NeuroArts Blueprint in its online Research Forum (June 9). The Blueprint is actively developing other partnerships and webinar content for 2023.





# Looking Ahead

Collectively, the activities of the first implementation year are validating the beliefs and experience of diverse people across disciplines and sectors, and around the globe. As more evidence establishes the crucial role of art in health and wellbeing, the NeuroArts Blueprint initiative is gaining momentum, drawing in more partners, and setting the stage for transformative impact.

The vibrancy and expansion of the field is measurably on the rise. We are seeing the term “neuroarts” come into more common usage—a Google search now returns 6,000 hits, a benchmark that we will monitor as our work evolves—and the vast community of stakeholders continues to grow.

A global movement is being advanced by the World Health Organization, through international research alliances, and in national healthcare systems where reimbursement for arts-related services is becoming available. In the United States, interest is visible at every level of government, including in commitments from the National Institutes of Health, the National Endowment for the Arts, Sound Health Network, and state and local arts agencies. Massachusetts has taken the lead on social prescribing, creating a reimbursement mechanism that allows physicians to prescribe arts-related activities. Advocates, including Americans for the Arts and the National Organization for Arts in Health, are embracing the Blueprint and helping to foster its implementation. We also see neuroarts being promoted by a range of professional associations, community arts organizations, and academic partners, in settings far too numerous to list individually.

It is a privilege for us to highlight all of this work and spearhead efforts to elevate the accomplishments of so many in the field. Solidifying the Neuroarts Resource Center as an anchor and magnet for partnerships is a core priority for 2023. As the neuroarts community coalesces, we will continue and expand on the many collaborative activities described throughout this report and branch out further.

In the coming year, we will be laser focused on developing a policy framework to support neuroarts and advancing approaches to financial sustainability. Supportive policies are in their infancy and we will dedicate significant time to strategic conversations with policymakers, advocates, and funders to help us understand what they need to move forward, and how we can be the most effective possible advocates for change. We anticipate that the True Value economic analysis of music’s impact on people with Alzheimer’s disease will yield additional insights on the policy framework.

In the research arena, it will be vital to expand on outcome measures, working closely with stakeholders in many fields, to increase the comparability of neuroarts research findings. As well, in conversation with key organizations, we will explore the feasibility of designing an “arts brain map” to identify the neurological systems engaged through the arts and aesthetic experiences and to identify research gaps. We also expect to make strides in developing the Academic Research Consortium, commissioning actionable field-building papers, and building the Community Neuroarts Coalitions Network.

We see education and professional development activities as crucial to attracting and retaining the diverse array of neuroarts professionals who can build evidence and expand practice. Key next steps here include envisioning a model curriculum for undergraduate and graduate studies and community-based training with partners in the field. Other activities include a Neuroarts Fellowship, to nurture the interdisciplinary contributions and leadership of early-career professionals, and an Awards Program, to recognize the impact of both established neuroarts research and practice leaders and emerging innovators.

Accomplishing this ambitious agenda will require a core staff team, an expanding network of invested colleagues, and committed funders. Working collaboratively, we will continue to weave together the many interdependent strands of the neuroarts ecosystem into an inclusive community. As partners, a shared conviction about the value and viability of the field of neuroarts remains our springboard for evidence-based action.

The NeuroArts Blueprint initiative requires additional financial resources to do all of this and generating more support and funding is at the top of our priority list. As this report documents, the collective work of building partnerships and expanding the neuroarts field is well underway. We are fully committed to our role as a hub and catalyst and excited about implementing this ambitious, future-facing agenda—but our scope and pacing very much depend on adequate funding.

The arts are already pushing out the boundaries of medicine and public health but we must go further by cultivating the field of neuroarts. The beauty of the arts is to be found not only in the sensory experiences of the maker and beholder but in our capacity to unleash its power for health and wellbeing.



# Call to Action

The work described here is only the beginning of the coordinated effort to elevate the field of neuroarts through partnerships. There are so many opportunities for you to get involved.

- Send us your comments and ideas about the NeuroArts Blueprint project.
- Share this work with colleagues.
- Sign up for the newsletter and attend the webinars.
- Partner on Blueprint action steps.
- Let us know how the Neuroarts Resource Network can best benefit you.
- Help develop a Community Neuroarts Coalition in your own region.
- Become an ambassador for the neuroarts field.
- Identify funders who might be invested in building the field of neuroarts

# Appendix

## Blueprint Principles, Findings, and Recommendations

### Five Principles

- Experiencing art is fundamental to being human.
- The arts can improve physiological and psychological health and wellbeing.
- Science and technology allow the biological effects of the arts to be measured.
- Neuroarts brings together the arts, science, and technology.
- The benefits of neuroarts must be equitably accessible to all populations in all communities.

### Five Findings

- The arts impact human biology and behavior differently than any other health intervention.
- Preliminary evidence suggests that neuroarts has economic and social benefits.
- Neuroarts-related activities are happening everywhere, but lack a cohesive structure.
- This is the moment to cultivate the field of neuroarts.
- Leadership and community-based engagement are essential to progress.

### Five Recommendations

- Strengthen the research foundation of neuroarts.
- Honor and support the many arts practices that promote health and wellbeing.
- Expand and enrich educational and career pathways.
- Promote sustainable funding and effective policy.
- Build capacity, leadership, and communications strategies.



# Appendix

## Spreading the Word

Recognizing the importance of growing the neuroarts community and creating a common understanding of the field's potential, the NeuroArts Blueprint initiative team shares information through presentations and media coverage throughout the year. We presented the core elements of the Blueprint at the following in-person and virtual convenings in 2022:

- Lake Nona Impact Forum (Lake Nona, Florida; February 23-25)
- Milken Global Conference, "Perfect Harmony: Music and Its Impact on the Brain" (Los Angeles, California; May 5)
- International Congress on Integrative Medicine and Health (Phoenix, Arizona; May 23-26)
- Sound Health (San Francisco, California; May 31-June 2)
- Aspen Ideas Health (Aspen, Colorado; June 22-24)
- Berklee Music and Health Institute, "Intersection of Music and Mental Health: Adolescents and Young Adults" (Boston, Massachusetts; July 28)
- American Psychological Association (Minneapolis, Minnesota; August 4-7)
- RSA Online Event (September 15)
- HERO Forum presentation: (Amelia Island, Florida; September 21-23)
- Sound Health: Renew/Remix at the Kennedy Center (Washington, DC; October 2-3)
- Creating Healthy Communities (Orlando, Florida; October 10-11)
- Palm Health Foundation/ Max Planck Florida Institute for Neuroscience, "NeuroArts Learning Panel" (Jupiter, Florida; October 18)
- National Organization for Arts in Health annual conference (Baltimore, Maryland; November 2-3)
- Summit Palm Desert (Palm Desert, California; November 11-24)
- Flourishing Network (Santa Cruz, California; December 2-4)
- Harvard University, Dr. Lawrence H. and Roberta Cohn Forum: "Creativity and the brain: How the arts can shape well-being" (Cambridge, Massachusetts; December 5)

# Appendix

## In the News

Media attention came from the following outlets:

- [Dana Foundation](#): "Could music therapy ease the world's dementia crisis?"
- [Modern Healthcare](#): "Healing power of the arts"
- [Multi-Housing News](#): "3 considerations for multifamily amenity design"
- [NPR Morning Edition](#): "Art and music therapy seem to help with brain disorders: Scientists want to know why"
- [NPR Short Wave](#): "How art can heal the brain"
- [Psychology Today](#): "Neuroarts: An emerging field with a plan to transform health"
- [Scripps National News](#): "Group hopes to expand opportunities for art therapies"
- [The Well of PBC](#): "Beauty and the brain: Human flourishing through the arts"

The resonance of this work is also evident in the many hundreds of email inquiries we have received since the Blueprint launched, in urban and rural centers, across America's heartland, and around the world. International queries came from Argentina, Australia, Canada, France, Greece, India, the Cook Islands, Slovenia, and elsewhere. In addition to growing our mailing list and informing our website FAQs, many of these correspondents shared their personal and professional stories with us, providing testimonials to the value of neuroarts.



# Special Thanks

The NeuroArts Blueprint initiative owes a debt of gratitude to its funders, supporters, cochairs, and Advisory Board, listed below.

## OUR FUNDERS

AARP  
bedari collective  
Dana Foundation  
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Google Arts and Culture  
Jeffrey Walker  
Johns Hopkins University  
JP Morgan Chase

## OUR FRIENDS AND SUPPORTERS

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# Image Citations

Pg. 2: *Mind on Fire*. Portrait of the artist's brain based on Saggital MRI. Artwork by Elizabeth Jameson. Used with permission of Elizabeth Jameson.

Pg. 5: Live performance by Kombilesa Mi at Civic Arts Church. Image courtesy of Sweet Water Foundation.

Pg. 13: Used with permission of the NYC Health + Hospitals Arts in Medicine program.

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