

The Study:

In 2020 and 2021, a2ru and the Michigan Institute for Clinical and Health Research (MICHHR) collaborated on a study that asked:

- What are the mindsets, approaches, and practices associated with the arts and humanities, and how do they inform the work of interdisciplinary teams—especially those teams whose purpose is scientific or medical?
- How do widely differing disciplinary backgrounds inform team interaction, resulting in collaboration that is more effective, less effective, or different in some way altogether from collaborative research by a team composed of similar or related STEM disciplines?
- What sort of support do arts/STEM research teams need, and what are the most effective mechanisms of that support?

In short, understanding that different disciplines impart distinctive disciplinary approaches and practices to their members, we wanted to find out what happens when those different approaches and practices come together.

Key Takeaways:

- Artists bring new perspective, tolerance for ambiguity, synthesis and translation, and a maker practice to the STEM research space.
- While arts/STEM teams face many of the same challenges as any interdisciplinary team, two challenges are particularly pronounced: the especially wide divide between STEM and arts practices and epistemologies, and the perceived hierarchy of knowledge that places science and medicine above the arts.
- Numerous practices help arts/STEM teams surmount these challenges, including bridging difference, promoting equity, building supportive structures, and creating a positive environment.
- Artists, scientists, and clinicians may or may not have the awareness, skills, or resources to put these practices into play and meet these challenges on their own. Support in the form of education, team facilitation, and thoughtful approaches to collaboration can increase art/STEM teams' likelihood of success.
- Like most interdisciplinary teams, arts/STEM teams can also benefit from project management support, funding, and generous timeframes.

Areas for Further Exploration Include:

- The original research questions of this study: How do arts approaches and practices inform the work of STEM research teams? The study was curtailed by the COVID-19 pandemic, so exploration of the research questions remains incomplete.
- The dynamic between disciplinary difference and disciplinary overlap. How does disciplinary difference arouse curiosity and excitement, or create frustration and alienation? How does disciplinary overlap create opportunities for communication and empathy, or diminish the possibility of new perspective?
- Conceiving of scientific and clinical problem spaces in ways that create more entry points for artists and those from other disciplines.
- Imagining entry points into arts research for scientists and clinicians.