

The Immersive Arts for Health Student Design Competition

The 2022 Immersive Arts for Health Student Design Competition is a global competition that challenges students to apply their skills and creativity using evidence-based research in order to design light installations that could have a positive impact on patient health. The competition is sponsored by the Jefferson Center of Immersive Arts for Health*.

This international competition is open to undergraduate and postgraduate students enrolled in any higher education institution, college or university during the Spring 2022 semester. Registration must include a faculty member's signature.

The top three winning entries will be produced by the competition sponsor and exhibited as immersive experiences at HOTBED Gallery, in Philadelphia, PA in the Fall of 2022. Honorable mentions entries will be displayed digitally as well.

Background:

Research shows that art can have a positive impact on human health, specifically in healthcare environments. Most existing research focuses on static art (paintings, prints, or sculpture) or, more recently, Distraction Therapy through virtual reality which shows promising benefits in pain management and lowered anxiety. One of the main features of this method is the creation of an *immersive experience*.

We believe similar outcomes, with direct sensory experience of dynamic or interactive art — unmediated reality, as contrasted with VR — could engage the patient in such a way as to positively affect the overall healthcare experience. This could result in an improved physiological and psychological impact on clinic visits. By removing the need for a VR headset, the artwork becomes more inclusive and the encounter with it more casual and spontaneous. Interactive elements offer the possibility for the visitor to affect the work directly. This allows a larger number of visitors to experience the work than VR does, at varying levels of participation. Some might choose to engage directly with an interactive work, while others might enjoy watching others interacting with it. Unlike VR Distraction Therapy, the clinic visitor could choose their level of engagement, thus adding a level of agency to the experience.

“Access to positive distraction techniques, together with a sense of perceived control over the environment results in lower stress and improved overall patient well-being”. (Ulrich, 1984, 2004)

Competition Brief:

Based on peer-reviewed research (on the psychological or physiological effects of art, immersive experience, and/or light on health), design a proposal for dynamic or interactive lighting that could be used to promote an engaging environment in a healthcare setting with the intention to immerse the viewer in a self-reflective or calming experience.

Students will choose from one of the provided healthcare sites provided by the competition for their installations. These sites offer a range of functionality, and demographic under the umbrella of healthcare settings. The targeted functionality of the site, as well as maintenance must be taken into effect. Guidelines and further information will be provided when the brief goes live on January 6, 2022.

Criteria:

- Your proposal must be backed by peer reviewed research regarding the proposed effect. Research is the foundation of this project. Intention of effect on a patient must be supported by previous studies. You are not limited to this list, but any research you use must be peer reviewed. An appendix with a list of supplemental research, as well as opportunities for discussions and tutorial on research via zoom sessions will be provided.
- Installations will be designed for the provided designated healthcare sites. These sites will be provided in the form of 3D models and plan views.
- Your proposal should take into account the working conditions of a medical clinic: patient demographic, cleanability, etc. These considerations will be discussed in zoom sessions.
- Consider the primary activities or procedures that need to take place in the given site and what that requires in terms of the desired experience outcome. Your work cannot impede the primary activities of the space.
- Your design cannot change the structure of the space, impede movement within, or interfere with activities that take place. In lighting design terms, you are designing decorative or accent lighting or light art, task lighting is acceptable, but your work must complement the essential lighting, not replace it (Keep in mind, although components and hardware - potentially in the form of a luminaire of some sort - may be necessary, it is the experience of light that is measurable for impact, not the object).
- Describe how the experience takes place, what is the proximity of artwork to the viewer, what level of engagement is necessary, what is the desired outcome?
- Energy use, durability and maintenance are important considerations for healthcare institutions. Please provide specifications on the wattage of the installation, the expected lifespan, and the instructions for startup, shutdown, and maintenance.
- Describe how the artwork is controlled. Is it automated, or can it be controlled by visitors to the space? Is it dynamic or interactive?
- Identify all major components and materials of the fixture.
- Design must be able to be prototyped within a budget of no more than \$500.00 for material costs and hardware. Details on budget considerations will be provided. Winning entries must agree to consult with fabricators in Philadelphia on the production of their concepts.
- Final digital board will be submitted online as an electronic file (The file size cannot exceed 15MB)

Final presentation should include:

- A hero image of the design in context (within one of the provided settings). This may include CAD renderings, hand or other digital renderings, or other construction drawings, plan/section views, Photoshop documents, etc. The hero image should bring your concept to life.
- A Title and a one sentence description. The description should explain the project and intention in a way that engages the viewer to learn more about the project.
- A written summary describing the problem you were trying to address

- A written summary of your concept, the research it is based on, and how it will address the problem. References to research should support your claim of the effects on the viewer
- A written description of how the design works, including diagrams of the hardware assembly and installation is required for proof of feasibility.
- Photos, videos, and other documentation of prototypes of the dynamic or interactive nature of the concept. Videos should be no longer than two minutes, time lapses allowed.
- All of the above should be submitted in the format of no more than four 11" x 17" pdf boards.
- Number each page in the order it should be viewed.
- DO NOT INCLUDE YOUR SCHOOL'S NAME ON THE BOARD.

Timeline and additional resources

Award Competition Brief goes live online January 6, 2022.

Additional resources on research, site models, tutorials and zoom discussions will be provided by end of day EST January 14, 2022. Info session dates are forthcoming, please bookmark the competition page for further information. <https://www.jefferson.edu/academics/colleges-schools-institutes/kanbar-college-of-design-engineering-commerce/jefferson-center-of-immersive-arts-for-health/competition.html>

Shared Google Drive

Additional information will be posted on a shared Google Drive with links to Research Resources, Site information, and tutorials. We will be adding resources to this shared drive throughout the competition.

<https://drive.google.com/drive/folders/1W958j1Q3leQQ95dZFbYsIOx44Mpp0P8h?usp=sharing>

Registration due by February 15, 2022

Students must be currently enrolled in a higher education institution, college or university during the Spring of 2022. A faculty member from their institution must sign the registration form.

https://www.jefferson.edu/content/dam/academic/kanbar/immersive-arts-center/Design%20Comp_Application_V5.pdf

Final submissions must be uploaded by 6pm EST June 1, 2022.

Guidelines for submissions will be provided.

Zoom Information Sessions:

Zoom information sessions will be available to all participants. Dates and link below.

Zoom sessions will be recorded and uploaded to the shared Google Drive for reference post session.

Topic: Immersive Art for Health Student Design Competition Info Sessions

Zoom Meeting Link for both sessions:

<https://us02web.zoom.us/j/85296231915?pwd=d0FiQXo3NjZRUIh1M3B1ZU54VnVTUT09>

Meeting ID: 852 9623 1915

Passcode: 720082

Friday, February 4, 8:00am EST

A one-hour Q+A session to discuss the competition

Friday, March 11, 8:00am EST

A two-hour Zoom session on research and patient considerations with experts from a variety of technological and medical fields.

Research and Tutorial Resources

We are providing a wide range of research and tutorial sources on topics around Arts and Health, the Effect of Light on Health, Physical Computing throughout the competition. These can be found on the shared Google Drive in the folders titled Research Resources and Tutorials.

<https://drive.google.com/drive/folders/1W958j1Q3leQQ95dZFbYsIOx44Mpp0P8h?usp=sharing>

Site information for design proposals

Dimensions and parameters for the sites you will be designing for can be found on the shared Google Drive in the folder titled Site Information.

<https://drive.google.com/drive/folders/1W958j1Q3leQQ95dZFbYsIOx44Mpp0P8h?usp=sharing>