s_u_b_l_i_m_e studio

certainty – Project Proposal
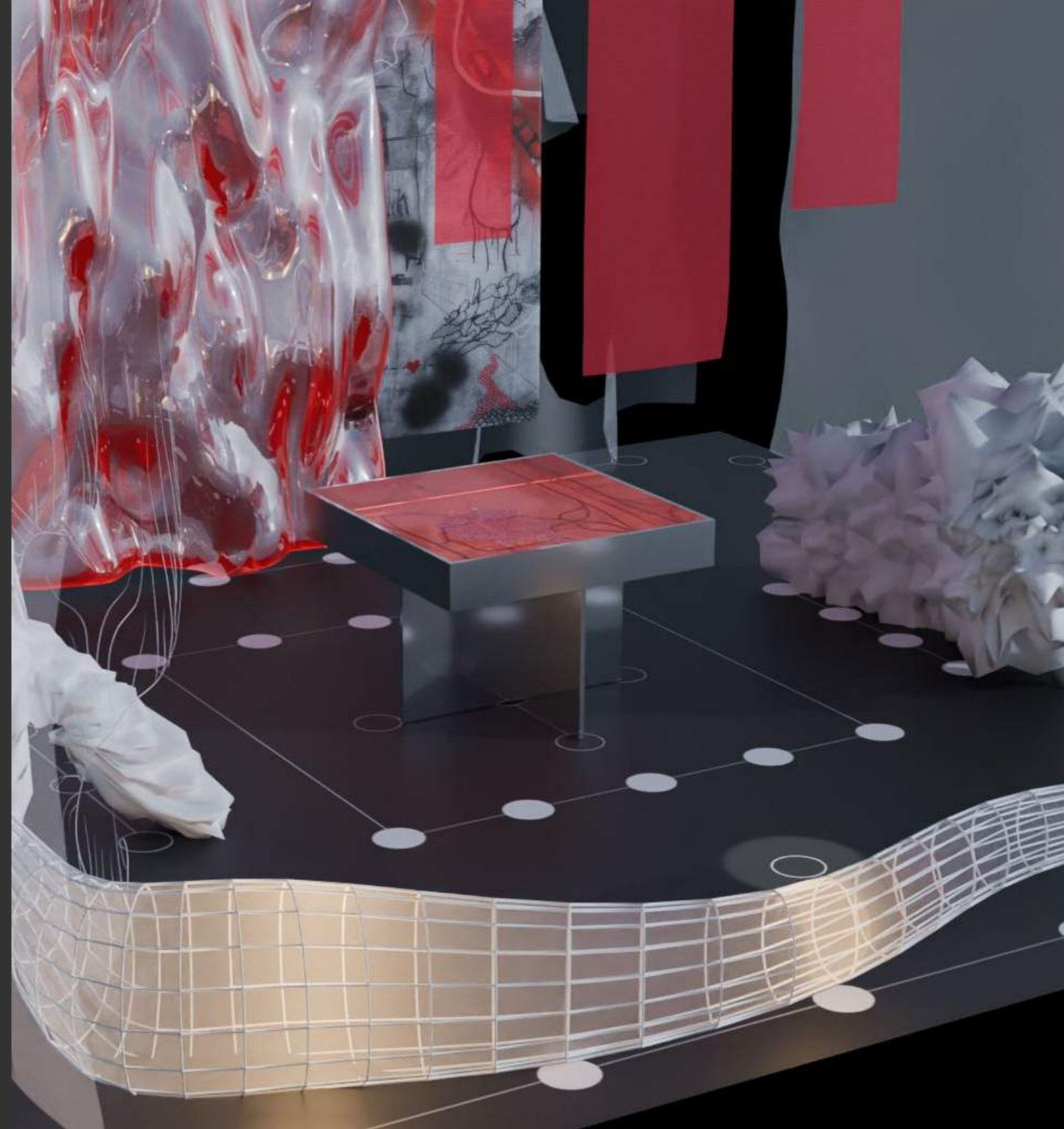
Sehmon Burnam & Vivian Hou

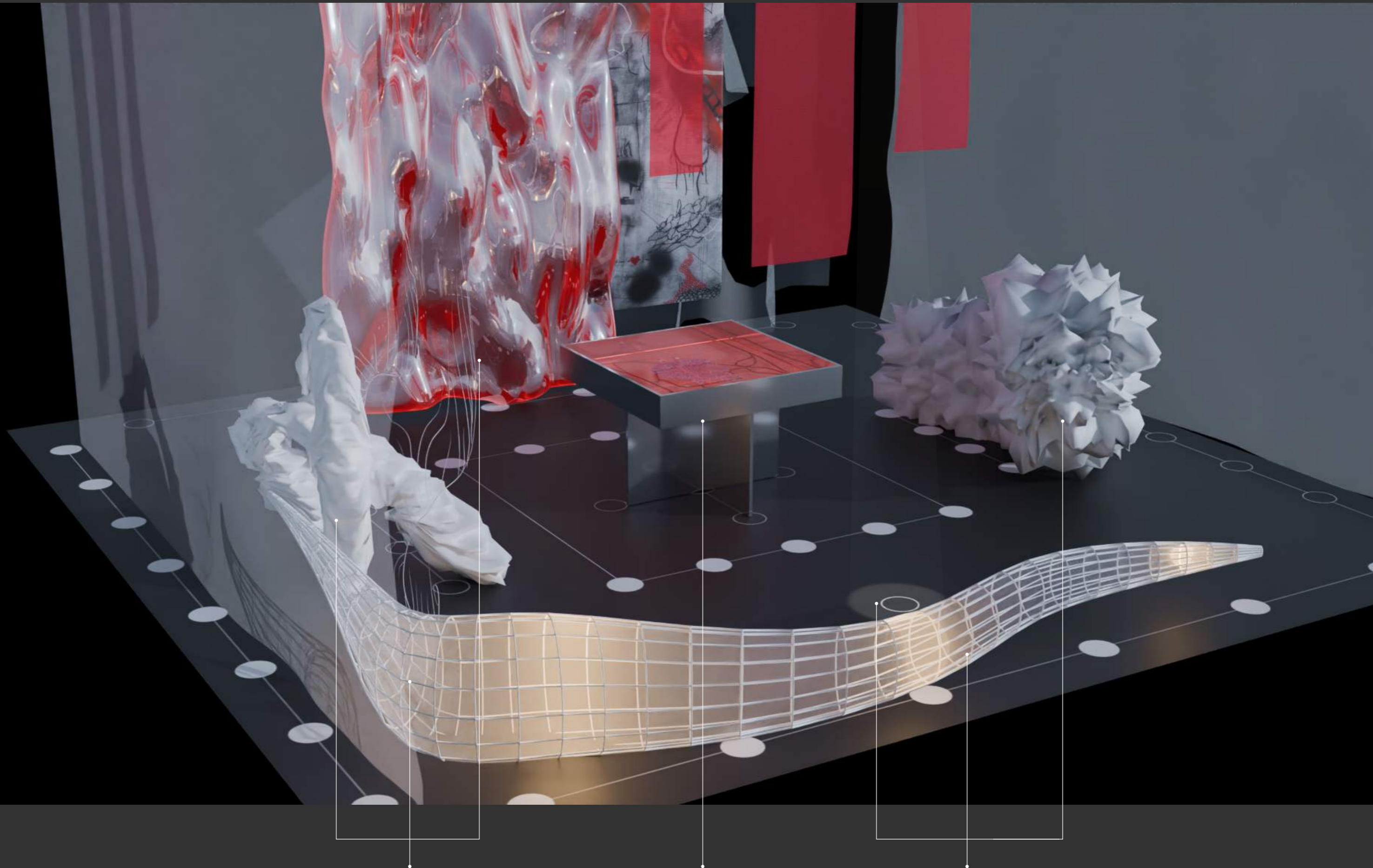**certainty** – Installation Proposal

certainty is a spatial installation featuring a slime mold, a primitive organism that is neither animal, plant, nor fungus. It's nourished and grown based on audience movement data and AI. The slime mold grows on a large plate at the center of the installation, while sculptures and hanging textiles divide the surrounding space, following the shape of an ancient map of the cosmos. Viewers interact intuitively with the sculptures, which guide their movements. Computer vision captures this data, directing food to areas on the slime mold's plate that correspond to high activity.

certainty thus creates a self-generating system where biological, technological, and spiritual logics collide, producing unexpected results.

Thematically, the project grapples with contemporary issues like collective spiritual alienation, human life, and ecology under the surveillance of automated decision systems (AI) with unresolved ethics. Materially, the work presents a totally unique integration of interactive arts, sculpture, and bio art.
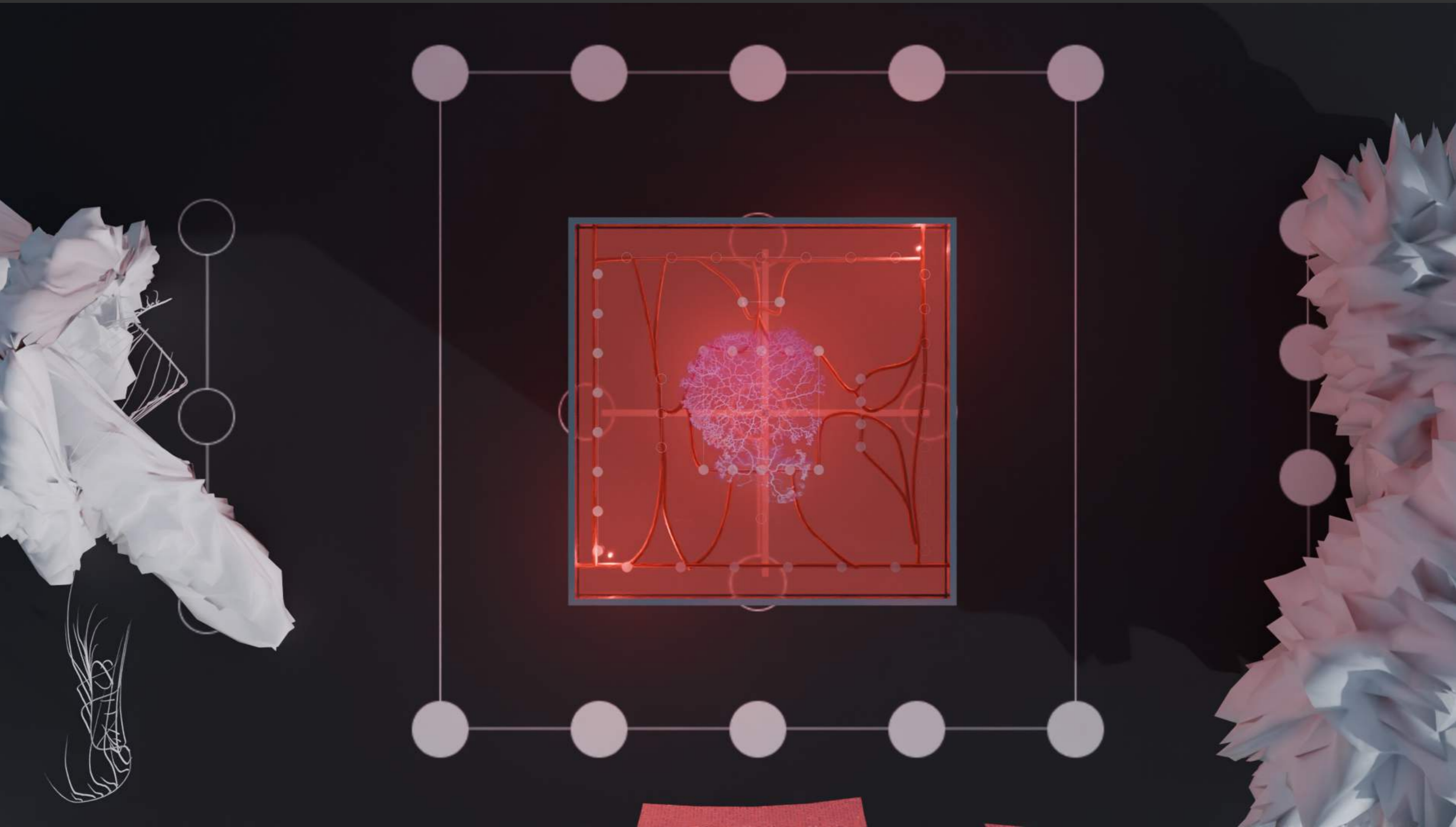
Visual and sculpture works arranged based on *He Tu* [1], the dotted diagram seen on the floor of the installation.

1. *He Tu:* an ancient map of the cosmos from the *I-Ching (Book of Changes)*.

Slime mold growing on agar plate with feeding system; controlled by data of audience movement within installation.

Lighting system controlled by Artificial Intelligence algorithm which aims to encourage audience movement to make the slime mold grow as large as possible.

The project is in the research and design phase, and will proceed through the following steps.

- *Research - Understand both the technical and artistic context for this project*
- *Design - Layout conceptual framework and initial software + hardware design*
- Prototyping - Build small scale model of interaction, test assumptions and system responses
- Refinement - Take learnings and critique from prototyping and update interactions
- Production - Final production build. Sourcing materials and fabrication
- Installation - Project setup, final testing and calibrating
- Documentation - Recording media, write ups, etc.

certainty Installation Rendering – Interactive Concept
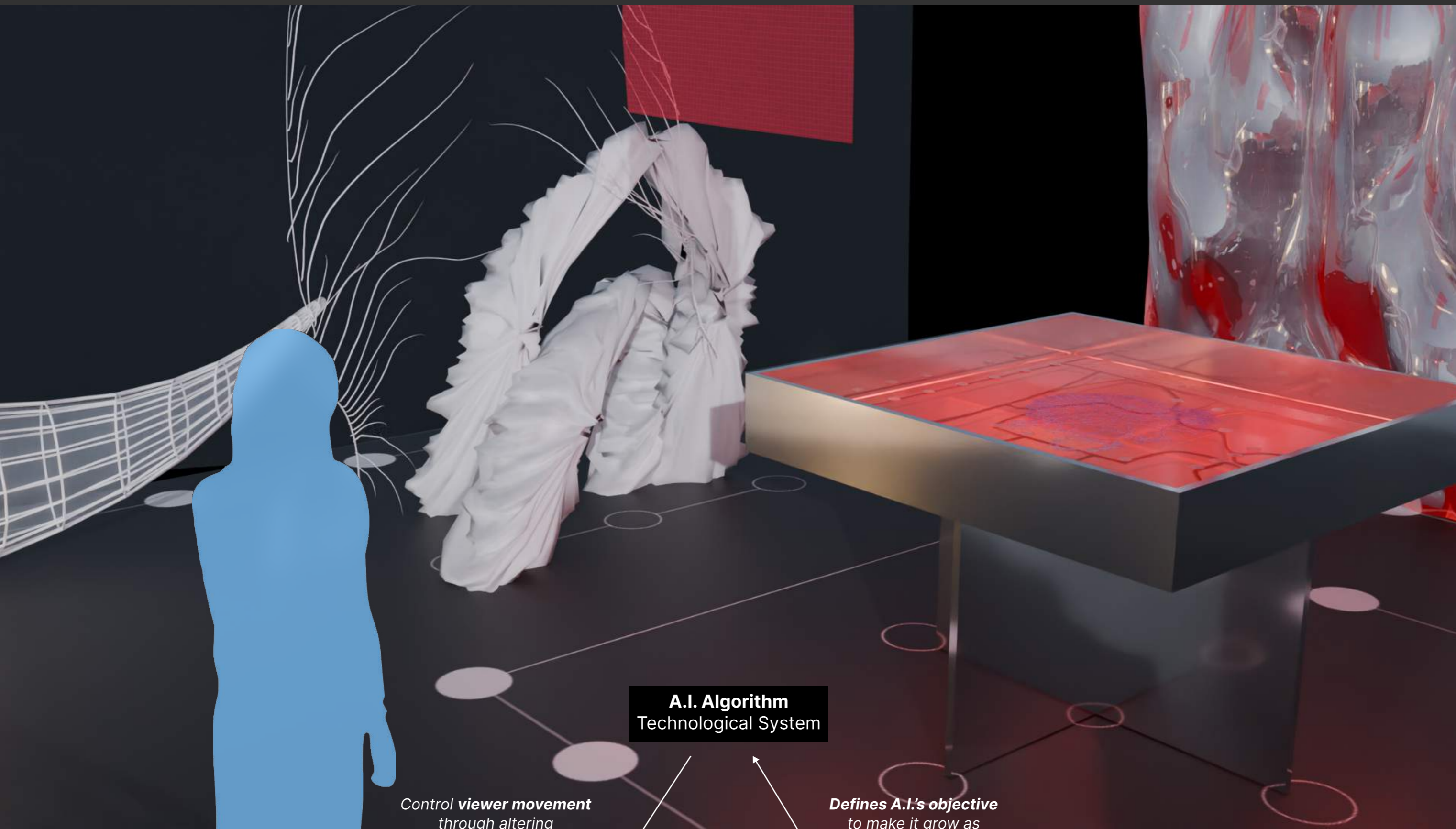
A.I. Algorithm
Technological System

Control **viewer movement** through altering environment lighting.

Defines A.I.'s objective to make it grow as large as possible.

Viewers
Spiritual System

Slime Mold
Biological System

Movement controls **food dispensary and growth** of slime mold.