

fathomless

A collaboration between Dr. Meilín Fernández García, Ph.D. & Melissa Ferrari

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Synopsis

Fathom, a unit to measure depth. A medical-science trajectory toward understanding the deep complexity of minds and the perception of people living with mental illness. *Fathomless* is an experimental animated documentary short that collages the history of psychiatry, including the themes of invisibility, control, demonization, as well as the struggle to find both solid science and the path to compassionate, effective treatment in neuropsychiatry.

Fathomless is a collaboration between neuropsychiatrist Dr. Meilín Fernández García, who created all lab imaging in the film, and filmmaker/ animator Melissa Ferrari.

Visually, *Fathomless* approaches the history of scientific imaging – from the similar aesthetic sensibilities of microscopes and magic lanterns to methods for visualizing “unseeable” conditions. A palimpsest of hand-drawn animation travels through spaces in the history of psychiatric treatment, incorporating antique magic lantern slides, archival references and pre-cinematic techniques. The animation evolves into Dr. Fernández García’s luminous lab imaging of neurons, stem cells and organoids used in neuropsychiatric research, tracing a trajectory to the biological interior of the mind.

To further explore the social histories and implications of her field of neuropsychiatry, Dr. Fernández García conducted a series of interviews with other scientists in her lab and institution. *Fathomless* features a collage of these conversations. Dr. Fernández García works in a lab that uses CRISPR technology and stem cells to research the neurons of people with psychiatric illnesses. Her research is part of a new chapter of psychiatry - one that understands the physiological components of psychiatric disorders and seeks to develop new treatments rooted in biology. Mental illness today is still so frequently criminalized and misunderstood socially, and Dr. Fernández García's work could help change perceptions within the general public and political spheres.

The foundation for this film was commissioned for the Imagine Science Film Festival Symbiosis Competition with support from Science Sandbox, which pairs scientists and filmmakers to create a short film. The work-in-progress of *Fathomless* was awarded first place in the Symbiosis Competition, and production was completed in October 2021.

Filmmaker Bios

Dr. Meilín Fernández García is a biochemist and molecular biologist specializing in Functional Genomics and Genetic Engineering in Neuropsychiatric Research. Raised in Puerto Rico, and a first-gen student she left to become a biochemist at the University of Pennsylvania. Currently a postdoctoral Associate at Yale University, she researches the pathophysiology of neuropsychiatric disorders using human stem cells derived neurons and multiplexed CRISPR technologies. Outside of the lab she is an amateur Asian-cuisine home cook, world traveler.

First-time Filmmaker.



Melissa Ferrari is a nonfiction filmmaker, experimental animation artist & magic lanternist. Her practice engages with the politics of contemporary pseudoscience and skepticism, the history of phantasmagoria and documentary, and the mythification of science. Melissa's films and magic lantern performances have been shown internationally in venues such as the Ottawa International Animation Festival, Hauser & Wirth, Ann Arbor Film Festival and Slamdance. She lives in Los Angeles, where she recently received her MFA in Experimental Animation from CalArts. Melissa currently teaches at Cal State LA and Queens College. Her work as a freelance documentary animator has been featured in publications such as *The New York Times Op-Docs*, MoMA New York, Nautilus, and PBS.

Filmography

Phototaxis (2017)

Agnodice (2018)

Relict (2020)

Fathomless (2021)



Credits

Co-Directors:

Meilín Fernández García
Melissa Ferrari

Animation & Editing:

Melissa Ferrari
Meilín Fernández García

Lab Footage:

Meilín Fernández García

Assistant Animation:

Jamie Wolfe
Jordan Wong
Chris Bishop

Interviewees

Kristen Brennand, PhD,
Stem Cell Biologist, Neuropsychiatry &
Genetics Research
Associate Professor, Icahn School of Medicine
at Mount Sinai

Carina Seah, M.S.
M.D./Ph.D. Student in Genetics
Icahn School of Medicine at Mount Sinai

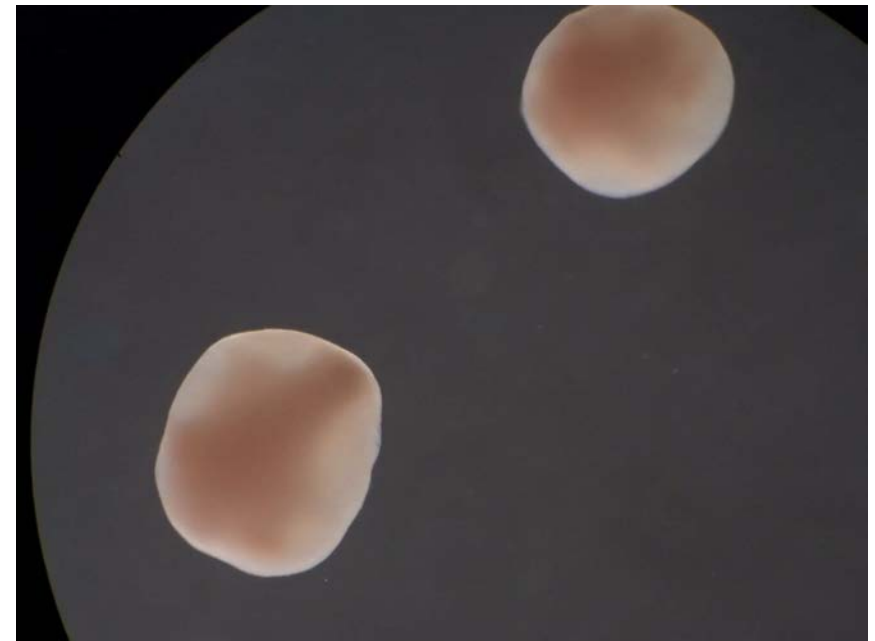
Sam Powell
M.D.,Ph.D student
Chair of the EHHOP Mental Health Clinic

Michael Deans, Ph.D.
Neuroscientist
Icahn School of Medicine at Mount Sinai

Aleta Murphy, B.A.
Organoid Specialist, Neuroscientist
Icahn School of Medicine at Mount Sinai

Supported By

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Technical Specifications

Running time | 7 minutes

Image Techniques | Hand-Drawn Pastel & Pencil

Animation, Magic Lantern Projection & Slides,

Archival Collage, Lab Imaging

Project Type | Experimental Animated

Documentary Short

Software | Dragonframe, Adobe After Effects &

Premiere

Language | English

Country | USA

Aspect Ratio | 4:3

Film Color | Color

Shoot Format | Digital

Press Contact

Melissa Ferrari: contact@melissaferrari.com

Links

Fathomless Trailer

<https://vimeo.com/melissaferrari/fathomlesstrailer>

Fathomless Website

<https://www.melissaferrari.com/fathomless>

