

Leonardo@Djerassi 2022

Leonardo@Djerassi, inaugurated as “Scientific Delirium Madness” in 2013, is a collaborative initiative of Leonardo/ISAST and Djerassi Resident Artists Program. The 2022 sessions celebrated the collaboration’s seventh successful year, and the first collaboration following the onset of the COVID-19 pandemic, with monthlong residencies for two groups of artists and scientists at the Djerassi Program’s retreat in the coastal Santa Cruz Mountains in California. While living, eating, working, and hiking alone and together, residents are provided space and time for their passions and practices to explore new artistic and intellectual terrain. With unstructured time, residents transform and transcend academic and traditional boundaries of art and science, uncovering exciting new questions as they go. This Leonardo Gallery features a selection of observations and work drawn from the 2022 L@D residencies, 31 May–28 June and 5 July–2 August 2022.

Situated atop the fault lines of redwood forest, creek beds, and rolling grasslands that overlook the Pacific Ocean and California’s Santa Cruz Mountains, the 583-acre Djerassi Resident Artists Program is the largest artists’ residency in the Western United States. Over four decades, Djerassi has provided the gift of time and space to more than 2,500 artists of all disciplines and backgrounds from all 50 states and some 53 countries around the world.

During their weeks on the land, residents experience time that is unencumbered by structure or direction, save that which they impose voluntarily on themselves. Residency applications are evaluated by committees of peers in each discipline without requirement or reference to project, deadline, or anticipated outcome. Despite the undirected nature of the Djerassi experience, or perhaps because of it, literary and artistic works created in residency have been recognized with hundreds of nominations and awards, including Pulitzer Prizes, National Book Awards, MacArthur “genius” grants, NAACP Image Awards, and Lambda Literary prizes.

The Djerassi Program’s then-Director Margot Knight explained in 2013, at the inception of the collaboration with Leonardo, that an art/science residency seemed to draw on elements of the organization’s DNA, given that one of its co-founders (and my grandfather) the late Carl Djerassi, was himself an eminent scientist, playwright, and author. As the years have progressed, however, the Leonardo@Djerassi sessions have become more and more entwined with the Program’s dual mission: to enhance the creativity of artists and also to preserve the land and its environs.

The participants in L@D 2022 waited through two long years of postponement due to the pandemic and subsequent pause in the Program’s operations. Selected from over 200 applicants and nominees, 10 adventurous souls arrived over the course of two sessions from 31 May to 2 August. Among them were cognitive and agricultural scientists, writers, a

biologist, a choreographer, a poet, a composer, an essayist, and a media artist.

They came from Seattle by way of Seoul, from London, Memphis, the Bronx, Brooklyn, and Boston, as well as the Bay Area by way of Brazil. Giant “macrophones” sprouted on the hills. An audience and the land itself were enlisted as performers and cocreators in an immersive multivenue performance piece in which all were called to contemplate the nature of our connections. New site-specific installations took root, reaching up from the earth and out through the airwaves, respectively.

Blog posts from the L@D residents conveying their work and experience are available at <https://leonardo.info/leonardo-at-djerassi>. Please enjoy the brilliance and potential these residents shared and realized. I hope you are inspired by this glimpse into the creative process.

ALEXANDER DJERASSI
Vice-Chair, Board of Trustees
Djerassi Resident Artists Program
Email: adjerassi@djerassi.org
Web: www.djerassi.org

Acknowledgments

Leonardo@Djerassi owes much to the generous support over the years of the National Endowment for the Arts, the Hewlett Foundation, the Creative Work Fund, Larry Goldfarb, the Steve Wilson Fellowship made possible by generative systems artist Sonia Sheridan, and anonymous donors. Its founders are many. We give gratitude to the board members of Leonardo and the Djerassi Program and the staffs of these organizations, among others, for their vision and support.

Note

The 2022 participating artists and scientists were: Jenifer Wightman, agriculture scientist (Bronx, NY); Krista DeNio, choreographer (Berkeley, CA); Chloe Crotzer, biologist (San Francisco, CA); Lisa Rosenberg, writer (Menlo Park, CA); Yosvany Terry, composer (Cambridge, MA); Haein Kang, cognitive scientist (Seattle, WA); Brian House, media artist (Brooklyn, NY); Oliver Morton, author and essayist (London, U.K.); Nancy Hynes, poet (London, U.K.); and Mark Mayer, writer (Memphis, TN).

See <https://direct.mit.edu/leon/issue/56/3> for supplemental files associated with this issue.

THE NETWORK PROJECT

Krista DeNio

The NETWORK project (of which I am choreographer/director/instigator) is an ongoing exploration and creation of audience-participatory, land-based performance experiences. These experiences are intended to share biological processes for communication and survival employed by tree communities and offer opportunities to contemplate ways/methods/design of systems that humans could implement in our own communities.

In the beginning, we met with Jonathan Cordero and Gregg Castro of the Association of Ramaytush Ohlone to have a conversation about working on their people's land and the concepts and precepts of the NETWORK project. Our team (including biologist/core collaborator Chloe Crotzer; sound engineer Elton Bradman; map designer Maria Dolores McVarish; cocreators Diana Lara, Heidi Erickson, Maica Folch, Mindy Zarem, Grace Shaver, Rosemary Hannon, paige sorvillo, and Amy Cranch; and poet Elizabeth Costello) was quickly grounded by our new friends in understanding the difference in the relationships that western cultures have to land and ownership (and being "from" "that place") versus indigenous cultures, who believe they are a part of that land (of the land itself) and thereby understand their inherent responsibility to it.



The NETWORK project experience, including performers Diana Lara (center), Heidi Erickson (left), Mindy Zarem (right), and audience members, July 2022. (© Krista DeNio. Photo © Hillary Goidell.)

Some questions we contemplated and offered, within the experience:

- How do you feel connected with the lands your ancestors call home?
- How do you give respect for those who have cared for your homelands before you?
- How do you care for the plants, animals, and waters that sustain you?

Somewhere in the middle, I was talking with Jonathan about when the land acknowledgment should take place within the experience, and he gently asked, "Isn't the whole experience you're creating a land acknowledgment?"

Krista DeNio

Email: krista@movingground.org.

Web: <https://movingground.org/>.



Audience member resting in NEST, by installation designer Tanja London. (© Krista DeNio. Photo © Hillary Goidell.)



Performers Esther Young (singing) and Maica Folch (dancing with tree); audience members resting on denim Mandala by Tanja London. (© Krista DeNio. Photo © Hillary Goidell.)

MACROPHONES

Brian House

Normally too low frequency to hear, infrasound travels vast distances through the atmosphere. It comes from calving glaciers, wildfires, energy infrastructure, and even HVAC systems at massive data centers. Big phenomena like these are entangled with the climate crisis. If we could hear infrasound, could we listen to the crisis as it unfolds across the globe?

For my residency with Leonardo at Djerassi, I developed my *Macrophones* project to try and find out. This work appropriates Cold War technology and combines it with current signal processing and machine learning techniques to make infrasound audible. I constructed three large low-frequency microphones on the Djerassi grounds; they recorded micro-barometric fluctuations through a sculptural wind filter. I put the recordings through additional noise reduction and resampled them upward by a factor of 80 into an acoustic range that we can hear. Thanks to Ambisonics and a real-time binaural mix, listeners at the site could then use head-tracking headphones to hear the infrasound spatially situated in the landscape around them.

For me, paying attention to how we are connected through the atmosphere, rather than through the Internet, is both poetic and political. My hope is that listening to infrasound nearby and from thousands of miles away can cultivate the expanded sense of the local on which an equitable climate future depends. This project had long been speculative, so when I finally got to stand there and hear those strange tones and crackles and booms rolling in over the hills, I was beyond excited. I've since taken *Macrophones* to sites including a city center, the Arctic tundra, and an old-growth forest, and I'm looking forward to installations to come.

Brian House

Email: bhouse@amherst.edu.

Web: <https://brianhouse.net/>.



Macrophones, installation, 2022. (© Brian House)



Macrophones, detail, 2022. (© Brian House)



Djerassi residents listening with *Macrophones*. (© Brian House)

DEAR PAMELA

Haein Kang

*Beat the drum incessantly so that the vast beauty rushes over
like waves of the Pacific beyond the mountains.*

Dear Pamela is a site-specific telematic artwork installed on the hillside of SMIP Ranch, the site of the Leonardo@Djerassi program. SMIP Ranch, located in the San Francisco Bay Area, is a fascinating place surrounded by magnificent panoramic scenes of the Santa Cruz Mountains and the Pacific Ocean. If you walk into the mountain, you will find artworks that manifest the beauty of weathering, which multiplies the mystic aura of this place.

Dear Pamela consists of a rudimentary log drum made from Pacific madrone wood and a sensing and control system that detects drumbeats and drives a Twitter account. Pamela Djerassi's poem, which begins with "the vast beauty repeats itself," is posted on Twitter when someone beats the drum. If someone is following @PDjerassi on Twitter, they will see the verse in their feed.

If you come across this log drum while hiking, keep tapping it so that the vast beauty rushes over like the waves of the Pacific beyond the mountains.

(Special thanks to Tim DeVoe for showing me the area's Pacific madrone trees and teaching me how to use a chainsaw.)

Haein Kang

Email: studio@haeinkang.com.

Web: <https://www.haeinkang.com/>.



Dear Pamela, Pacific madrone wood with artist-customized electronics, 2022. (© Haein Kang)



Dear Pamela, interactive site-specific installation, 2022. (© Haein Kang)

THROUGH

Mark Mayer

The unaccounted for mass of the universe must be passing through her tonight. Something is. Dr. Emily Mena, post-doc at the Tilden Lab, is parked in front of her house weeping about her father's death as if for the first time in many years. And he isn't dead, he isn't even sick. He's 59. They talked today. He played pickleball.

It's *tonight* that is doing it to her. The word makes her weep. *Tonight*, which reduces the whirly cosmos to these specific transits, this 11 pm when from this blue sedan, she remembers them catching an ecstatic loose dog running in lightning zags twenty years ago in Northside Park and sees, not as prophecy, just in normal human anticipation, his bed at West Mercy General, his dry nose hair breathing, his flattened chest. What is going on?

Shall I tell you? When a soul exits the time layer, it creates a small puncture. A tight whirlpool persists around

the puncture even after the puncture has healed. Humans call the suckhole grief. It is not a stable vortex. It wobbles as the currents shift; it slides back and forth on the time layer, pulling old nights in old sedans into its churning. She is brushing the hair on his arms with her fingers. She is tacking to a bedroom wall a bib from his granddaughter's Thanksgiving 5K. She finds him weeping while washing his bicycle. Ancient fingers hold a jigsaw piece rubbed brown. All this, tonight, in her car.

Or, likelier, she's just sad. She's had a long day and no dinner. The tunnel in her chest is hunger, not vortex. She follows the tunnel out of the blue sedan. On her stoop, through the tunnel walls, she can see the garden pots in a concentric stack, pots that used to have plants and should again someday. She unlocks the front door. The lock makes a sound like *oracle*. She moves at her speed, an hour per hour. She brushes her teeth, she rinses, she sleeps.

Mark Mayer

Email: mark.g.mayer@gmail.com. Web: www.markgmayer.com.

OPEN STUDIO, INVISIBLE ART

Lisa Rosenberg

As a poet, my art is largely invisible. I arrived at Djerassi anticipating the gifts of a cohort and long, quiet blocks of time. But I hadn't expected the transformative gifts of space, or rather space-*and*-time—an ironic oversight for anyone trained in physics. There, in the generous space of Middlebrook Studio B, threads of inquiry unreel and gained focus. Processes of thought and composition could find articulation, populate the walls, reveal patterns, bubble up, and boil down to a constellation of scrutable work: nascent, under revision, and nearly complete.

- A poem connecting nebulae and grape vines
- A long essay braiding memoir, craft, technology, and politics
- Talks on systems and shared tools of science and art
- Skeleton of an essay collection
- A group of successive erasure poems

Insights, camaraderie, wanderings, conversation, and extended reading marked the weeks. Synergies and correspondences surrounded us. I made a shaky truce with the site's abundance of spiders—my unlikely weaver-mentors. Spiky dandelion-look-alikes ruled the slopes outside my window. Raptors above, foragers below, birdsong in the distance.

anyone lived on a pretty fab hill
(with up so floating many stars chill)

I titled my blog posts "Weeds and Stars," after a thread in recent poems. This also felt fitting to the territory. You really can't look around yourself at Djerassi without finding wild plants, creature tracks, curious geometries, and the broad canopy of sky over the Pacific and foothills.

Open studio. Empty studio. Portfolio of window light and piled paper. Language on the walls, in the air, along the spines of what is wished and worked for—

wept their sowing and wove their sang
sun moon leaf wing

Note: Poem fragments in this article allude to "anyone lived in a pretty how town" by E. E. Cummings.

Lisa Rosenberg

Email: lrconsulting@me.com. Web: <http://www.lisarosenberg.com/>.



Weeds and Stars: Assemblage, paper collage, 2022. (© Lisa Rosenberg)

OBSERVATION MAZE

Jenifer Wightman

While my residency was delayed for two years due to COVID-19, my 2022 Djerassi summer was a celebratory molt! Early in my residency I chatted with (Ranch Director) Tim DeVoe about my practice of building *mud paintings*—living ecosystems where the endogenous microbes photosynthesize pigment. Individually the pigment in a single cell is too small for humans to see but the color amassed by growing microbial colonies functions as a visible indicator pointing us to their ecosystem niche. Tim said two things: Visit Mel Henderson's *Observation Shelter* (a delightfully hard-to-find cave on the grounds) and talk to Hideo Mabuchi (a former resident with chops in material science and ceramics). After chatting with Hideo, I decided to harvest clay from the vole mound land art scattered all over the grounds. Clay is so densely packed that I hypothesize it occludes microbial colonization; perhaps it could create something of a maze for the microbes to navigate. With support from a RPI HASS production grant, I filled a 14" × 16" × 1" plexiglass vessel with mud, clay, seeds, dead lizards, scat, flowers, and other materials from the grounds; the resulting *Observation Maze* was installed on the NW wall of the Artist's Barn. I encourage all who visit Djerassi



Observation Maze mounted on the NW wall of the Artist's Barn and reflecting the Woodside view. (© Jenifer Wightman)

to please send me a photo of its evolving painterly progression. Just as in my *mud paintings*, the endlessly changing view from my studio was a reminder that everything is changing and we are always already invited to change with it. I too was a fleeting pigment in the Woodside landscape. Thank you for the time to change and be changed in *that* space.

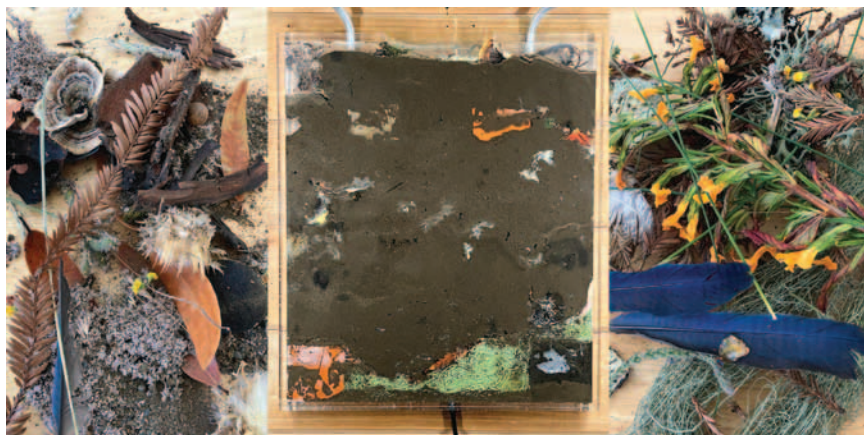
Jenifer Wightman

Email: audiblewink@gmail.com

Web: www.mudpaintings.com



Observation Maze, installation, 2022. (© Jenifer Wightman) Clay collection (from left to right): vole (can you find it?) excavating den and making mounds; clay made from cleaning vole mounds; clay tiles—kiln dried and air dried; placing the clay, mud, and other materials into the plexiglass container.



Observation Maze on day 1 of installation (center); materials found on the grounds and incorporated into the mud painting (left and right). (© Jenifer Wightman)