# Future Tense: Art, Complexity and Predictability

Roundtable II Program

May 31st, 2023



Presented in collaboration between the UCI Beall Center for Art + Technology and PST ART: *Art and Science Collide*.

#### With many thanks to our contributors:

Advisory Board:	Artists:	Exhibition Coordinators:
Jeffrey Barrett	Ralf Baecker	David Familian
Claudia Czimczik	Carolina Caycedo	Jesse Jackson
Steven J. Davis	Cesar & Lois	Fatima Manalili
Efi Foufoula-Georgiou	Harrison Studio	Gabriel Tolson
Jean Jose Fried	Lynn Hershman Leeson	
James Gimzewski	Chico MacMurtrie	
Diane Hohnbaum	Julie Mehretu	
Caroline Jones	Clare Rojas	Getty PST Coordinators:
Charlotte Kent	Theresa Schubert	
Jeffrey Krichmar	Laura Splan	Melissa Lo
Ellen K. Levy	Hege Tapio	Heather McDonald
Kelli Sharp	Gail Wight	Selene Preciado
Soroosh Sorooshian		
James Owen Weatherall		

Edited by Gabriel Tolson and Fatima Manalili

# Table of Contents

Program Schedule and Links	3
leff Barrett	4
Harrison Studio	5
Chico MacMurtrie	6
Gail Wight	7
Ellen Levy	8
Laura Splan	9
Hege Tapio	0
Cesar & Lois	. 1

# Program Schedule | 10am - 4pm PDT

Symposium access: https://bit.ly/3OG6xQt

Recording: https://beallcenter.uci.edu/artist-talks

10:00 – 10:05 am	Welcome and introductions by David Familian (5 min)
10:05 – 10:50 am 10:50 – 11:10 am	1st Speaker: Jeff Barrett (45 min)  Discussion (20 min)
11:10 – 11:55 am 11:10 pm 11:25 pm 11:40 pm 11:55 am – 12:25 pm	Black Box Projects Artists Part I: 15-minute presentations (progress report) Harrison Studio Chico MacMurtrie Gail Wight Discussion (30 min)
12:25 – 1:10 pm	Lunch Break (45 min)
1:10 – 1:55 pm 1:55 – 2:15 pm	2nd Speaker: Ellen Levy (45 min)  Discussion (20 min)
2:15 – 3:00 pm 2:15 pm 2:30 pm 2:45 pm	Black Box Projects Artists Part II: 15-minute presentations Laura Splan and collaborators Adam Lamson, Danielle McPhatter, and Hannah Lui Park Hege Tapio Cesar & Lois
3:00 – 3:30 pm	Discussion (30 min)
3:30 – 3:45 pm	15-minute break
3:45 – 4:00 pm	Wrap up by David Familian (5 min)

# Jeff Barrett Irvine, CA



"My current research involves two general topics.

First, I am interested in attempts to resolve the measurement problem in quantum mechanics. The measurement problem arises from the fact that the standard theory's two dynamical laws are incompatible: one is linear and the other nonlinear. Since they constitute contradictory descriptions of the time-evolution of physical states, they threaten to render the standard theory logically inconsistent if one is unable to specify strictly disjoint conditions for when each applies. The theory tells us that the linear dynamics is to be used in all situations except when a measurement is made in which case the nonlinear collapse dynamics is to be used; but since it does not tell us what constitutes a

measurement, we do not know when to apply the linear dynamics and when to apply the collapse dynamics. I am particularly interested in solutions to the measurement problem that drop the collapse dynamics altogether.

Second, I am interested in using evolutionary game theory and self-assembling games to model basic features of empirical and mathematical inquiry. In particular, I have been modeling the coevolution of descriptive language and predictive theory in the context of Skyrms-Lewis sender-receiver games. Recent models have examined how effective priors and the very notions of truth and probability might coevolve with language. Most recently, I have been working with Brian Skyrms to show how such evolutionary games get started then interact with each other to form more complex games. This is the theory of self-assembling games."

Jeff Barrett serves on the advisory board of UCI
Beall Center's PST ART exhibition. His work can be further
researched here:

https://faculty.sites.uci.edu/jeffreybarrett/

<sup>1.</sup> Barrett, Jeff. 2023. "Jeffrey Barrett." Department of Logic and Philosophy of Science | UCI School of Social Sciences. https://faculty.sites.uci.edu/jeffreybarrett/

#### Harrison Studio

#### Santa Barbara, CA



"The Harrisons in 2007." Harrison Studio, CA

Founded by the late Helen and Newton Harrison and continued by their son Joshua, the Harrison Studio takes as its starting point the rays of force that intersect within narrow loci—the watershed of Sante Fe, the Mediterranean Sea, the peninsulas of Europe. Their works take the form of research-based installations and interactive environments guided by the question, 'How Big is Here?' Equally micro and macro focused, their close examinations of subjects unveil larger apparatuses of political, economic, and social powers which exert their influence on environmental localities.

The Harrison Studio shares with Bruno

Latour the belief that explaining problems without

reforming their means of observation "partake[s] in the

expansion of power, but not in the re-composition of



Sierra Nevada, installation view, Ronald Feldman Fine Arts, New York, 2011. (© Helen and Newton Harrison. Photo courtesy of Ronald Feldman Fine Arts.)

its content." Their practice seeks to evolve machinic, "desire-based problem solving" into a systems model of future-thinking, to resist the Newtonian isolation of disciplines and retie the Gordian knot. The Harrison Studio leads viewers to find comfort and empathy in indetermination—to re-weave the associations between causal forces and to witness their own place amongst invisible threads.

For Future Tense: Art, Complexity and Predictability, Harrison Studio is preparing Sensorium, the final and unrealized design of Helen and Newton Harrison. More of their work can be viewed here:

https://www.theharrisonstudio.net/

<sup>1.</sup> Latour, Bruno. We Have Never Been Modern. Harvard University Press, 2012.

<sup>2.</sup> Harrison, Newton, "Sensorium: The Thinking," Video Interview, August 7, 2021. https://www.youtube.com/watch?v=KOC-H2lcYIk

#### Chico MacMurtrie

Brooklyn, NY



Pneuma World, installation view, Muffatwerk, Munich, 2016. (© Chico MacMurtrie/ARW. Photo by Luise Kaunert.)



Photo by Andrew Boyle for NeueHouse, 2019.

Chico MacMurtrie marries traditions of soft sculpture and kinetic art, movements popularized concurrently in the 1960's in reaction to expanding globalized electronic networks. He imbues the machine form with human sensibility, with "supple" gestures that emerge from empirical rationality. Through progressive developments in organic robotics, MacMurtrie arrives ultimately at a futurist technobody sensitive enough to approach.

Responding to the receding boundary between the organic and the machine, MacMurtrie's sculptures extend "webs of interconnected, inflatable members" ever further across the uncanny valley.<sup>2</sup> Shared breath materially bridges the lungs of his machine and those

of viewers, joining not the methods of communication between human and robot but their very lifeforce. In Tedlar fabric and microbial animation, MacMurtrie's systems twist space into a cyborg architecture: a landscape of dynamic hybrid forms that interact with their environment, collectives of modular nodes whose lifelike realization is greater than the sum of its parts.

Chico MacMurtrie is developing Dual Pneuma while in residency at the UCI Beall Center, an interactive inflatable sculpture intended for presentation at the 2024 Future Tense exhibition. His larger practice can be accessed here:

http://amorphicrobotworks.org/

<sup>1.</sup> MacMurtrie, Chico, "Chico MacMurtrie," Video Interview, September 11, 2010. https://www.youtube.com/watch?v=4ocqhT7gA2I

<sup>2.</sup> MacMurtrie, Chico. 2022. "Biography." Amorphic Robot Works. http://amorphicrobotworks.org/about-1

# Gail Wight

#### Stanford, CA



Photo courtesy of Silicon Valley Laureates Artist Laureate Awards, 2018.



Pool, installation view, Cerulean Blues, Stanford, 2017. (© Gail Wight.)

Gail Wight seeks to reveal and evolve the mechanistic-Universe model into a poetics of Gaia.

Symmetries and intuitive capacities of the biosphere are expanded in Gail's collages, forming a grammar of convergence. "Visually, I attempt to construct biological allegories that tease out the impacts of life sciences on the living: human, animal, and other."

Her collaborations with scientists have explored such disparate inquiries as the symbiotic relation between gut microbes and the mind, the effects of wind in color theory, and the alien timescapes of lichen.

"Recently, my imagination has fixed on the topic of deep

time. I find myself craving a better understanding of the unknowable past." Her genealogies of biological research interface humans with their environment and aspire to construct nonlinear, cooperative models for living with machine algorithms.

While in residence at UCI Beall Center's Black Box program, Gail Wight has developed Ostracod Rising for the 2024 Future Tense exhibition. More of her work can be viewed here:

https://web.stanford.edu/~gailw/

<sup>1.</sup> Wight, Gail. 2023. "about this work." Gail White; works of art. https://web.stanford.edu/~gailw/Wight\_Projects/about.html

# Ellen K. Levy

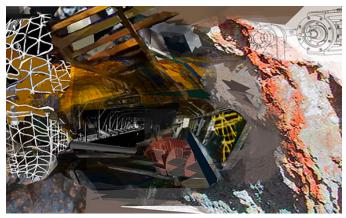
New York, NY



Photo courtesy of Ellen K. Levy.

"Ellen K. Levy engages the mental loop of seeing, connecting, and processing by juxtaposing imagery that creates meaning from unexpected and often disconnected relationships. Printing, painting, and animating images of complex systems relating to society, biology, and economics, she creates visual contexts that critique technological progress gained at the cost of ignoring the importance of the environment and society."

Levy's practice traces the limit of chaotic systems, that fertile precarity known to spawn new forms of organization.<sup>2</sup> Her work, distinctive in its



Ellen K. Levy, Extraction, 2020, Acrylic and gel over print, 40 x 60".

color and dynamism, collapses multigenerational technologies of imaging and assembles visuals from diverse fields. Reflecting Katherine Hayle's understanding of posthuman complexity as a state both infinitely compressed and expansive, Levy articulates the time and space-warping transformations shaped by contemporary movement.<sup>3</sup>

Ellen K. Levy serves on the advisory board of the UCI Beall Center's PST ART exhibition. Her visual research practice can be viewed here:

http://www.complexityart.com/

<sup>1.</sup> Levy, Ellen K. 2023. "Biography." Complexity Art. http://www.complexityart.com/

<sup>2.</sup> Prigogine, Ilya, and Isabelle Stengers. Order Out of Chaos: Man's New Dialogue with Nature. Verso Books, 2018.

<sup>3.</sup> Hayles, N. Katherine. Chaos Bound: Orderly Disorder in Contemporary Literature and Science. Cornell University Press, 1990.

# Laura Splan

#### Brooklyn, NY



"Laura Splan in her studio." Photo by Danielle Ezzo.

Laura Splan is a transdisciplinary artist expanding intersections of "Science, Technology, and Culture." She creates conceptually layered and technically crafted work, exploring the biological sublime while unraveling its entanglements with infrastructure. Her work embodies biomedical artifacts through sensory encounters that amplify tactility, light, and sound. Often incorporating raw biodata or the materials of her own body, Splan's interpolations shuttle between technological and organic systems, constructing an integrated posthuman landscape through translational acts.

Recent exhibitions include immersive installations, networked devices, participatory sculptures, and intimately-scaled objects assembled from resonant materials. Her research-based multimedia practice and



Laura Splan: Manifest, installation view, NYU Langone Medical Center Art Gallery, New York, 2017. (© Laura Splan. Photo by NYU Langone Art Program & Collection.)

scientific collaborations allow audiences to engage with complex science through familiar entrances—wallpaper, muscular pulses, doilies and household appliances are among many. Companion lectures and workshops unpack postanthropocentric themes while providing insight into the laboratory techniques, specialized software, and textile methods applied in her work.

For her presentation in Future Tense, Laura Splan is developing a sensory encounter with collaborators Adam Lamson, Danielle McPhatter and Hannah Lui Park. Her previous collaborations with Adam Lamson can be viewed here: https://www.stickysettings.com/; and Laura's greater practice can be viewed here:

https://www.laurasplan.com/

<sup>1.</sup> Splan, Laura. 2023. "About." Laura Splan. https://www.laurasplan.com/about

# Hege Tapio

#### Stavanger, Norway



Photo courtesy of Hege Tapio.

Informed by her upbringing in Norway's oil capital, Hege Tapio examines the self as a landscape for "extreme self-mining," inserting her body into extractive apparatuses to derive energy and spectacle from her tissue. Through biosensor installations, video, performance, and a liquid fuel medium drawn from her body fat and urine, her work invokes renewed empathy for the complexity of human and inhuman actors.

Tapio furthers a post-minimalist methodology of encoding affect into mechanical structure. Her rituals, drawn from alchemical and spiritual narrative, re-mythologize inert motions of energy refinement



Humanoil, performance documentation, 2020. (© Hege Tapio.)

and transcend the bio-techno barrier. Belonging simultaneously to the future and past, Tapio's "emotion-technology" forges a third, hybrid space of immanence between contemporary systems.<sup>2</sup>

Hege Tapio is developing EPHEMERAL, a semidermal implant designed to release synthetic emotions. Her bioart collective, i/o/lab, can be viewed here: https://www. contemporaryartstavanger.no/place/iolab/, and her greater practice can be accessed here:

http://tapio.no/wp/

<sup>1.</sup> Tapio, Hege. 2023. "Hege Tapio - Norway's First BioArtist." Noba Art. https://noba.art/hege-tapio-norways-first-bioartist/

<sup>2.</sup> Tapio, Hege, 2023. "Futures of Living Technologies | Team." Futures of Living Technologies. https://feltproject.no/our-team/hege-tapio/

#### Cesar & Lois

#### Campinas, Brazil | San Marcos, CA



Photo courtesy of Cesar & Lois.

Cesar & Lois is a collective of artists and researchers probing humanity's relationship to nature and unfolding intersections between technological, biological and social systems. Run by media artists Cesar Baio (Brazil) and Lucy HG Solomon (California), the collective frequently involves a web of additional artists and scientists in their multidisciplinary experiments.<sup>1</sup>

Formed in the summer of 2017, Cesar & Lois has produced a number of projects that reform our relationship to the biosphere. They look often towards microbial organisms as models for "decentralized"

[cognition], equitable distribution of resources, and collective engagement." Cesar & Lois has most recently been engaged in merging fungal and Internet-based communications to cultivate a "fungal colonization of human knowledge systems."

Through Beall Center's Black Box residency

program, Cesar & Lois is developing Hyphaenated, an

experiment-as-artwork intended to capture interspecies

signaling. More of their work can be accessed here:

https://cesarandlois.org/

<sup>1.</sup> Cesar & Lois. 2023. "About; Thinking and Living Together" Cesar and Lois. https://cesarandlois.org/about/

<sup>2.</sup> The League of Imaginary Scientists, 2023, "The [ECO]Nomic Revolution: when microbiological logic determines everything," Video Interview, March 19, 2018. https://www.youtube.com/watch?v=q-EELFUJrlI