Kathy High and Jennifer Johung in Conversation

Conversation between artist Kathy High and art historian Jennifer Johung on February 25, 2025 that focused on connecting art and biotechnology while considering the ethics of manipulating life.

This transcription is provided as a record of the live conversation, for educational use.
Read more about the Wexner Center for the Arts' Mission, Vision, and Values.

Transcript

Emily Haidet (00:00:08):

Hi, everyone. Welcome to the Wexner Center for the Arts. My name is Emily Haidet. I'm curator of public programs in the Department of Learning & Public Practice. Thank you all for being here today for a conversation which I'm so excited for with Kathy High, artist Kathy High and art historian Jennifer Johung. They'll be speaking today about connecting art and biotech—biotechnology. At the end of our conversation, we'll have some time for Q&A. Please be sure to raise your hand, think of your questions throughout, jot them down. We do have a hotline, so if you'd rather not raise your hand and chat, you can text your question to the hotline. We'll have a slide up at the end with that number. It's (614) 813-3416. So this talk is part of the Arts, Technology and Social Change series here at Ohio State, which is an initiative conceived by the Department of History of Art, Department of Art, Wexner Center for the Arts, and the Translational Data Analytics Institute. The residency program is a cross-departmental platform that involves public engagement on campus and around Columbus to explore questions on technology and social change in our contemporary moment.

(00:01:24):

This series is sponsored by Global Arts + Humanities Discovery Theme, and Learning & Public Practice programs are made possible by CoverMyMeds and Huntington. Special thanks, as always, to the teams at the Wex who made this event possible and to the group that pulled together this series, including Kris Paulsen and Amy Youngs. I will now turn it over to Associate Professor of Art, Amy Youngs.

Amy Youngs (00:01:46):

Oh, great. Thank you, Emily. And thank you all for coming. And a big thanks to our friends at the Wex for hosting us this evening. Thank you to Director Gaëtane Verna and to Emily Haidet and the whole Learning & Public Practice team, Dionne Custer Edwards, Sarah Robison, Jess Long, and David Pierre. I'm fortunate to be a coorganizer of this series with the fabulous Kris Paulsen in the Department of the History of Art, who's the force behind making the connections happen between our departments and the Wex, including with the previous curator Kelly Kivland and including the artists, writers, and historians that she's in community with all around the world.

(00:02:40):

Together we present the fifth installment of the Art, Technology, and Social Change micro-residency program. So this Global Arts + Humanities Discovery Theme-funded program brings together artists and scholars who are working at the edges of their disciplines, examining how art can be a site for thinking, rethinking, reimagining our technological and social futures. I also must thank the whole team, especially Wendy Hesford, Puja Batra-Wells, and Breanne Lejeune for making this program and countless others happen on campus. This program is also supported by a Department of the History of Art's new contemporary art and curatorial practices certificate program. This new program just launched and aims to educate the next generation of curators, focusing on hands-on practice, art-historical training, and curatorial and critical engagement with the visiting artists and thinkers such as those with us tonight.

(00:03:49):

All right. I won't replicate what Emily already said about the Art, Technology and Social Change program, but I will say that in the last few years we've hosted a slate of incredible pairs, including artist Zach Blas and art historian Pamela Lee on queer AI, and Sarah Rosalena and anthropologist Elizabeth Povinelli on Indigenous futurisms. Deaf filmmaker Alison O'Daniel and filmmaker Vera Brunner-Sung on accessibility and radical forms of captioning. And artist Katherine Behar and media theorist Jennifer Rhee on automation. And please mark your calendars for our next event, which will be in fall, which will feature artist Mimi Ọnụọha and surveillance-studies scholar Simone Browne speaking about missing data and Black geographies. That'll be on October 9th.

(00:04:48):

So our desire with these micro-residencies is to invite artists and scholars to campus for a big public event like now, but also for workshops and professionalization events with students, like class visits and one-on-one studio meetings. So we've kept our guests very busy, and we'll continue to do that tomorrow. And I really want to thank them both for their willingness to do this for our students and for their extreme generosity for our community here.

(00:05:19):

So tonight's guests are artist Kathy High and art historian Jennifer Johung, and they'll be talking about bioart, which is part of the field of art technology, but it also really eclipses this category because bioartists tend to ask the biggest questions like what is life and how can we change it? Should we? And who gets to decide? So we're really fortunate to have Jennifer and Kathy here together today to grapple with these challenging, sticky, and intertwined ideas. And I'll just briefly introduce Jennifer and Kathy.

(00:05:56):

Jennifer Johung is the director of the Center for 21st Century Studies and professor of contemporary art and architectural history at the University of Wisconsin-Milwaukee. She's the author of *Vital Forms: Biological Art, Architecture, and the Dependencies of Life*; *Replacing Home: from Primordial Hut to Digital Network in Contemporary Art*; and coeditor of *Landscapes of Mobility: Culture, Politics, and Placemaking*. She's published articles on a wide range of topics across performance, visual, and urban studies as well as bioart and technology. In addition to her research, she's curated exhibitions in Milwaukee, New York, and Los Angeles in the US, as well as in Australia.

(00:06:44):

She is in conversation today with Kathy High, an interdisciplinary artist, curator, and educator-scholar. She collaborates with scientists and activists to consider living systems, animal sentience, queer ecologies, and the ethical dilemmas of biotechnology and medical industries. She exhibits her videos, performances, and conceptual works focused on issues of gender and technology, and pursues works of bioscience/bioart and waste studies. She's committed to environmental justice and do-it-together collaborative action. She's a full professor in the department of arts at Rensselaer Polytechnic Institute in Troy, New York, and affiliate faculty member at Rensselaer's Center for Biotechnology and Interdisciplinary Studies, and director of their Bioart and Technology Laboratory. At the same time, she works in the community of Troy, New York, as the project coordinator for a community urban environmental center called NATURE Lab. So without further delay, I introduce to you Kathy High and Jennifer Johung.

(00:07:52):

We'll start with Kathy presenting a bit about her work.

Kathy High (00:08:00):

Thank you, Amy.

(00:08:01):

Thank you, Amy, for that lovely introduction and so nice to be here and to see you all. Thank you, everybody from the Wexner, everybody from OSU… well, no—from Art + Tech—and everybody else, and also Jennifer. I'm very much looking forward to this conversation. So I'm going to go do a whirlwind tour reviewing about six of my projects, which then Jennifer and I will unpack a bit if there's time. And if not, we'll continue the conversation later.

(00:08:28):

So I am an artist who comes from a background and training in sculpture and in filmmaking. Originally I was trained by some very experimental filmmakers, structuralists, if those of you who are old in the crowd, and who were amazing. And since then, in about the past 20 years, I've been working with biological arts or bioarts. I'm interested in the abject, in disgust, in life and death, and feminist and queer issues. And so we'll get into some of that.

(00:08:59):

So I'm starting with this project, which is now 20 years old, and it's called *Embracing Animal*. In this project, there were two different iterations of it. Was very interested in working with these particular rats, and that's because they're actually science models. They're laboratory rats—they're transgenic rats—meaning that they have some mix of species in their genetic makeup. And in fact, what we've done is we've made them to be sick with certain kinds of diseases. So they have human and rat DNA in them.

(00:09:36):

I was invited to participate for one of the iterations at MASS MoCA, which is a really great museum in western Massachusetts, in an exhibition curated by Nato Thompson called *Becoming Animal*. And the exhibition I did was called *Embracing Animal*. You can see part of the installation there in the photograph. I put three of these transgenic rats on display in this

museum for 10 months. 10,000 people came through the museum a month. That's 100,000 people who were seeing and being in close contact with these creatures.

(00:10:11):

Part of the reason is because this was like a reverse-engineering project. I wanted to see what were the animals like who the research was being conducted on them to develop pharmaceutical drugs for diseases that I have, that other people have. They're developed for inflammatory immune diseases like rheumatoid arthritis and Crohn's disease and other things like this. And I hadn't really known much about animal research at this point; I was really naive. And I learned a lot. And so I wanted to treat these animals differently than they might have been treated in the lab. Not that they're ill-treated in the lab, but just to give them a different kind of life.

(00:10:56):

I was also interested in the fact that they were an invention. This is what Donna Haraway says in this quote, they were kind of man-made. They're man-made and they're actually products. And in this sense, and because they're developing drugs that we use, Donna Haraway talks about them as if we are in a kinship with them. They're like our siblings.

(00:11:18):

So this is the model number, the model that I bought and they're HLA-B27 rats. They were developed in 1990 as the first patented transgenic rat for this kind of research. They were bred to be sick, as I said before. But I was interested in actually offering them alternative care, as I had received for my Crohn's disease, and trying to think about what this meant. There's a lot of talk about care right now, but I'm actually really interested in extending this idea of care to include action, to include something that really manifests in larger projects, so we can continue talking about this.

(00:11:59):

The next project is *Blood Wars*, which happened... I'm skipping through time now. This happened in 2009 and 2010 in Western Australia at the art and science residency called SymbioticA, and it was run by Oron Catts and Ionat Zurr. And it was an amazing space and gave me a lot of freedom to explore a lot of this. This project was actually looking at blood and thinking about a kind of competition. If we could use our blood to compete with each other instead of ourselves, that might be a good substitute for war, right?

(00:12:36):

So I modeled it after the World Cup series, so it could be upscaled or downscaled. This is like a downscaled version. Two different groups have some kind of an encounter, and then those two people who win become engaged in another competition and that's who picks the winner. This meant that people had to give me their blood. It's amazing how many people wanted to give me their blood. I don't know what it is—everybody loves vampires, I guess—but it was really easy to collect the blood. People were fierce competitors, as you can see here.

(00:13:10):

What happened was, after I drew the blood, I separated the white blood cells out from the red blood cells in a process in the lab that I was taught by an immunologist. Then in the bottom left-hand slide, you can see that I've stained the white blood cells with two different types of

fluorescence. One's kind of orange-ish reddish, and the other is green. And then I put them together in a petri dish. So these blood samples are coming from two different people and they're going to go into a petri dish to have the battle.

(00:13:42):

So here's the depictions. And this is time-lapse photography over about 8 to sometimes 15 hours of the cells going at each other, if you want to have it that way. And it was really interesting because they didn't do what we typically thought immune cells should do. We think of them as being aggressive, as fighting off the other. And in this case, yeah, they did sometimes do that, but they also sometimes made love. Sometimes they refused to engage, sometimes they just laid down and died mutually. This is my interpretation of what the immunologist I was working with said about this work. I didn't know how to read this except that I thought it was kind of the closest thing to structuralist film I probably would ever make. Anyway.

(00:14:30):

The next one is *Rat Laughter*, and this is my homage to the rats postmortem, how we say. One of the things I learned about when I was working with the rats is that they have a way of communicating that is way beyond our hearing. They communicate with ultrasonics. So our hearing stops at about 20 kilohertz. They go much higher. I was really interested in this and trying to think about what kinds of things happen in the laboratory that might irritate them at that level, like opening up cellophane, these kinds of things.

(00:15:07):

But the project morphed when I found out that at 50 kilohertz, rats giggle, and they laugh. And this has been documented by other scientists, not by me, by other people like Jaak Panksepp and such. And it was really amazing because if they laugh, that means that there's another kind of connection that we have with them. It's a kind of hedonic connection between our laughter and their laughter.

(00:15:32):

So this project was able to be actually realized, started in 2009, and it actually was realized in 2023, although this is just the first iteration of the realization. I got into a laboratory, and I was able to work with different rats. They weren't transgenic, but they were gifted to me by another scientist. And we were able to play for them an ultrasonic chorus of laughter, which you can't see the speaker. There's a speaker above where "Rat Laughter," the text, is that would be playing ultrasonic chorus of laughter to the rats. And then this is a microphone to pick up their responses.

(00:16:13):

So we did different iterations of this project, I mean of this performance where we're playing it to them and viewing them. Leaving the room, so they're not looking at us, they're not reacting to us, they're reacting to the sound. And the behavioralist who was working with us said they're actually really interested in this. We don't know if they're laughing back because we haven't been able to figure out how to track all of the information we recorded, but they were really good and they were really interested and very excited about this.

(00:16:45):

So we feel like this is really positive, it raises lots of questions, but to be able to laugh with the rats was really delightful for me. And to give them a little bit of this laughter before they're basically killed, which is what's happened with rats at the end of the experiment, sadly. So that's those guys.

(00:17:06):

The next one, I'm shifting a bit to slightly newer work where I'm beginning to deal with the human gut microbiome. So we know that the human gut microbiome has been a big thing in the last 15 plus years. I became very interested in fecal microbial transplantation, which for those of you who might not know, is a process of taking stool from a healthy person and implanting it into a sick person hoping that the healthy bacteria from the healthy person's gut might populate the unhealthy person's gut and make them healthy again.

(00:17:43):

Somebody, a really good friend, Kira O'Reilly, asked me, "if you could have a FMT with anybody, who would it be?" And I said, "David Bowie, of course." And that was because I don't know where it came from, but I've always admired him. So I started posing and doing these photographs of David Bowie throughout these iconic periods of his career, which were really important to me as a young teenager, somebody who was trying to figure out my queer identity. And then I took these photos, and I sent him a letter with them saying that I wanted to make an exchange of the photographs for what I called a throwaway item, his poo, and that I wanted to do a fecal transplant with this material.

(00:18:23):

This was a year before he died. He was really wrapped up in doing his final work. I didn't know he was sick. I didn't know he was dying. Maybe I wouldn't have sent them to him. I didn't hear back from him, and I understand. But I did think if I got the fecal microbial transplant from David Bowie, I would become a little bit of Bowie.

(00:18:42):

All right, moving on… whether you think I can do that or not. The *Family Bio-Crests* is another one where I'm working with fecal microbial material. But what I was interested in here was who do we share our microbiomes with? With people who were in our house, in our home, who we live with, partners, pets. I started collecting. Once I got all the IRB approvals, I started collecting samples from different families, including their dogs, their cats, et cetera, and plating them. This was done in the lab of Dr. William DePaolo in California at the time. I was really happy, you could tell. We then analyzed the materials to try and see what was the makeup of them. We did that through proteomics and through DNA sequencing.

(00:19:29):

And then these are the family heraldic shields that we developed after the fact because it was true, families share certain kinds of bacteria. And in this case, we call... I had to name them something else because you can't identify the people. The household was called Gentle Grandpa. And they had three women living there, one male baby, and one feline, cat. They all shared three bacteria that were found in their gut. This is also another version. There are two females in this household. They also shared three bacteria that were shared across their guts. This is a 3D version of the 2D shield that was done by Marguerita Hagan, who's a really

incredible ceramicist in Philadelphia, who I collaborated with on this. And then here's a third version again in this case with their dog—a male, a female, and their dog.

(00:20:23):

Quickly moving through this. This is the last project and it's actually a project in process, so it's a little sloppy. So forgive me, but we'll go for it. It came out of some other projects where I was again looking at the bacteria from my own gut and finding that there was a lack of diversity in the bacteria. Different agar dishes like these promote the growth of different kinds of bacteria. And in many of the plates that I was using my own bacteria on from my fecal matter, there was nothing there. And it was like finally I talked to the scientist I was working with about it and he said, "Oh, you probably have a situation called dysbiosis." Dysbiosis is a kind of situation that you can have in your gut where you don't have a lot of diversity in your gut microbiome. It can come from taking too many antibiotics. As somebody who has been treated by antibiotics because of my Crohn's disease, yep, that's probably right.

(00:21:21):

Then this is the odd… this is where you have to hang in there with me. I really got interested in vultures because... I've always been interested in vultures anyway, but then there's been some really great research on their gut microbiome. And it turns out not only do we share a very high acidic stomach with the vulture—we're the only two species that have such a high acidic stomach in all of the Earth—They also have these very toxic bacteria in their gut to help them process the foods that they eat. And one of them, fusobacteria, I happened to have a preponderance of in my gut. So it made me think, where are we going? Where are we going as a culture? Where are we going in terms of where our guts are changing and how things are really looking?

(00:22:09):

There's a lot of talk about wellness in our guts right now. Healthy guts, eat well, all that. Not everybody does that, not everybody can afford to do that. We eat a lot of McDonald burgers or Dorito chips, or drink alcohol and all of these things. We're ingesting microplastics. What is it really doing to us? So I convinced another scientist, Dr. Mani Arumugam, who's in Copenhagen, to join me. Here are some of the foods that were from my own history. We all probably share some of this. And this is the list that I was able to make up from working with his teammates to introduce to my stool sample.

(00:22:53):

Process is ongoing right now, and this is one of the last parts of the experiment, is that they introduce it to this artificial gut called the SHIME, a Simulator of the Human Intestinal Microbial Ecosystem. We're trying to tank the gut system to see about it. I think this is our evolution. I think this is where we're heading and how do we deal with that? So we'll see. The results are still to come in. Here I was able to go two weeks, three. No, a month ago to go to Copenhagen to film it. So here is the SHINE in action with my fecal matter in its belly. So there you have it. It's like the fake gut.

(00:23:35):

I'm just going to close with this image. This one's for you, Jennifer. This is an image that was really iconic for those of us who are working in bioart because this is maybe one of the first

bioart pieces. This piece is always used by Oron Catts when he does his talks. I love that. And Jennifer and I thought we would reclaim it again. And it's two scientists, Charles and Jay Vacanti, put this image of this mouse with an ear on its back. Has anybody ever seen this image? Okay, a lot of you. Great. Does it freak you out? Okay, a little. 10 years ago, 20 years ago, everybody would've been like, "Yeah." But now it's like, "Eh, whatever."

(00:24:21):

This is actually an advertisement for developing synthetic organs and it's a really interesting kind of publicity stunt on these guys' parts. And I just will leave it with that and open it up to our conversation. Thank you.

(00:24:34):

Okay, let me see if I can move this carefully over here.

Jennifer Johung (00:24:50):

Yes. Thank you, Kathy, for that. I know it was really quick, but hopefully we will have time to go through most, if not all, of the projects that you talked about a little more in-depth over the course of our conversation. This is all good now. Yes. Oh, very carefully.

Kathy High (00:25:09):

(slide projection goes blank) Did we lose you?

Jennifer Johung (00:25:11):

It might take a minute to come back.

Kathy High (00:25:14):

I don't know...

Jennifer Johung (00:25:16):

Because I feel like—

Kathy High (00:25:17):

It'll come back.

Jennifer Johung (00:25:18):

Okay.

Kathy High (00:25:19):

You can just start.

Jennifer Johung (00:25:20):

Okay. Yeah.

Kathy High (00:25:20):

Think of that rat that I showed you.

Jennifer Johung (00:25:22):

We'll just think of the rat. Have it in the back of our minds. Okay, so to begin our conversation about manipulations with life as activated in these kinds of collaborations between art, biology, and biotechnology, I did want to start by thinking more closely about rats, your work with rats and *Embracing Animal* and *Rat Laughter* as a way to open up a conversation about these new forms of kinship dependency—something I've been interested in—and the related ethics it might arise. You had the OncoMouse, the quote about the OncoMouse. We have the OncoMouse, we have the ear mouse. Hi. Maybe we're going to look at the pictures of the rats and the mice now. So rats and mice, we know, are the primary research models oftentimes bred primarily for research. And so I wanted to hear you talk about how these rats as these animal research objects—yay (slide projection reappears)—become art objects in your work and then become subjects.

Kathy High (00:26:21):

You don't need to read that. Yes, yes. Uh-huh.

Jennifer Johung (00:26:23):

And that elicit empathy from us and require all these practices of care. They require a lot from us to keep them alive. And then the process of witnessing them dying is something I also find really interesting. So can you talk about how those transitions from research object, art object, subject come up across these projects, and then what surprising forms of kinship and relationality might come up too?

Kathy High (00:26:48):

Yeah. I was really scared when I started this project because I hadn't really done something like this before. I have to also credit Adam Zaretsky, another bioartist, who's really a little crazy for giving me the courage to do it because we were working together and he designed the website for this project. So when I did it, I was trying to figure out how to look at these rats outside of the lab in a way that gave them a kind of subjectivity that we don't do when they're in the lab because basically they're subjects of the experiment, etc., etc., and they're research objects.

(00:27:28):

So this was something that became really evident when I was actually working with them because each of them had such a different personality. They were really very individual and very different from one another, both in terms of how healthy or not healthy they were, but also in terms of their personality. So these things became true. We named them, we insisted that they be called those names and people began to understand who was who throughout the exhibitions. There were two different exhibitions.

(00:28:00):

It was also a little bit illegal what I was doing, so it wasn't really... There were some loopholes and I was able to get them. So it was risky in many, many senses. And I was scared I was maybe

taking a risk with their lives, but we had veterinarian care coming in to check on them in the exhibition so they would be looked after. And I just hoped everything would go well and I got lucky, and it did.

(00:28:31):

And I was able to treat them through different kinds of environments in the structure that I showed you. It was massive, it was like 20 feet long, nine feet high. They had plenty of places to hide because there were people looking around them. They slept through the most of the day, so it wasn't that exciting. But I was interested in showing the public what transgenics meant because people didn't know this at the time. And also to raise a kind of consciousness about research animals and how research animals are ignored and aren't counted. This is a huge service they do for us.

(00:29:07):

And this interesting thing of being able to switch from using a chemical in a lab where you can standardize it, and you order it, and it comes the same thing to ordering a rat or a mice, a mouse, and it's the same thing. It's a very odd thing to someone on the outside of science.

Jennifer Johung (00:29:25):

And I think you said somewhere I read that you don't even like rats. You're like, "Oh God, I don't want to. Please do not put me in this space with rats." But then there's something important about this spending time with these animals, you spending time, the caregiver spending time, even the viewers spending time because it's an installation that they're living and they're breathing and some of them are dying, some of them are getting more sick. And there's that length of time in which people are moving in and out of these rats' lives, and the lives of these rats are just continuing. That's something that's incredibly interesting to me with my background in performance. There's something I wanted to ask you about the significance of performance. And maybe I'll just also turn to *Blood Wars* so we can talk about more of all your work.

(00:30:14):

So in *Blood Wars*, this is a work that occurs across time. Time is really important to it, the tournaments occur. And like rats, we also have these different connotations to blood. So we think of inherited traits, bloodlines, racialized dominance, the politics of health and disease. And I think that all those connections start to become palpable over time. So I'm wondering if you can talk about how art and performance might activate these kinds of new forms of relating—in this case cells to cells—but also in your work humans to nonhumans, humans to cells. So what is it about time and perhaps performance that starts to allow these new kinds of relations to start to emerge, if that makes sense?

Kathy High (00:31:06):

Yeah, totally. I think I've finally come to accept the fact that I make work incredibly slowly and it's something that's just, that's it. And also bioart, for those of you who are working in either ecology or art or bioart, it's slow. Life is slow. And it doesn't always do the thing you're supposed to tell it to do because you're telling it, and it's going to be like, "No, that's not what I want to do." So there's all of that built into it.

(00:31:32):

And then on top of it, yeah, I'm somebody who really learns from these projects. I feel like they're for me as much as for anybody else, maybe more so for just me. Because I want to learn how these relationships evolve, and that's the only way to do it is to experience it and to go through it. And so in a way, I try to give the audience a proxy to that too. But I'm the one who's really getting the most out of it, frankly.

(00:32:01):

Because with the rats, and it's true, they had such good care and I made sure that they had care going into the museum show that you saw. The nightwatchman fell in love with the rats and asked to take them home after the exhibition. So we split them. Some went home with me and some went home with him and his wife. We were the ones who got to take care of them when they died.

Jennifer Johung (00:32:25):

You cared for them right until the end.

Kathy High (00:32:25):

Yeah.

Jennifer Johung (00:32:26):

So even though the exhibition is... And that's the thing about bioart, when you're dealing with these living beings, it's like the exhibition ends, but they don't end.

Kathy High (00:32:35):

They don't end.

Jennifer Johung (00:32:36):

Sometimes they end. We do have examples of work where that killing ending ritual is part of it.

Kathy High (00:32:43):

Like Oron Catts and Ionat Zurr. Yeah.

Jennifer Johung (00:32:44):

Oron Catts and Ionat Zurr, the *Tissue Culture & Art Project*. But there always is that, what will we do? Are we going to witness the living out of that life and then care for these animals through their death? Or in the case of these tissue-grown things, are we going to... No one's going to take these tissues home and take care of them, even though people have wanted to do that. I think there's a similar story with some tissue grown. I think it was the pig ears. I'm going to talk about this tomorrow in Kris's class, where the gallery guard was like, "Oh, please teach me how to feed them. I don't want to let them go." But they're just tissues. And so there's something interesting happening with the scaling up and down of life in these works.

Kathy High (00:33:31):

Yeah, and I think it's really complicated because looking at our blood fighting each other is really... In some ways it's abstract. It's just different colors blinking on the screen here. But at the same time, it is a manifestation of a kind of idea of us fighting each other. And it's also false at the same time because it's looking at different ways that we think about our immune system, which is much more complicated than those very simplistic ways of describing it. And our blood reacts differently than we would, or it did here anyway, than we would've anticipated. So I think that's always the key is that there's going to be some way of trying to coax people to think in relation to these different scales, to these entities, which are all organisms, just at different scales. The full organism is the rat, and then the cell, and then you get beyond that down to the virus or whatever. And how do we relate to those kinds of things? And even how do we relate to the rats because they're so like, "Oh my God, a rat"?

Jennifer Johung (00:34:33):

Yeah, they're like naked rats, just running around.

Kathy High (00:34:34):

Yeah, naked rats. You get into it. I'm sorry, you guys, just get a rat, you get into it.

Jennifer Johung (00:34:42):

I promise you—

Kathy High (00:34:42):

Yeah.

Jennifer Johung (00:34:44):

Yeah. Because even with a *Blood Wars* project, people are really getting into it. They're really like, they want to win. This is also for me. We want to dominate, we want to win. And you're identifying yourself, your whole self, with your white blood cell, and that becomes incredibly important. And that suddenly over time, and because you're in this competition thing where you're relating to somebody else, that your identity gets framed as one of the little flickering things. You're going to get really upset if your white blood cell is the one that just turns over and just dies, and doesn't fight.

Kathy High (00:35:19):

No. I even had people asking me, "What should I eat the night before my blood is taken so that I can win?" And I was looking at them like... And I make up something because I'm like, "Oh, they were looking to me as an expert."

Jennifer Johung (00:35:31):

Protein.

Kathy High (00:35:31):

I should know this. "Drink lots of apple juice." It was really ridiculous, but people were really beginning to take the thing seriously. And the project was actually kind of a joke to try and

punch holes in the ways that we talk about bloodlines, relationships of power between us through blood. Kings, the bloodline of kings, these kinds of things. And to poke holes into that to show that the model actually breaks down language a lot wise, and the model breaks down biologically, too.

Jennifer Johung (00:36:07):

Right. And then how do we identify ourselves? I know we're moving quickly, but I do want to get to your work on fecal transplantation in the gut microbiome because I think this also stretches us to think about where biological identity might be located if, say, through a fecal transplant, you might become Bowie. Or in the *Family Bio-Crest* that suddenly now we're seeing the same bacteria as our dog, as well as our cat, and our partner, or what have you. So I'm wondering if you can talk about how these gut microbes define or might distort how we think about the boundaries between one body and another body. And then what happens then, if suddenly... This is me and that's you, but... Kathy and I also have a joke because when I checked into the hotel, they said, "Oh no, you're Kathy High." And I was like, "This could not be more perfect," that I get to be Kathy High.

Kathy High (00:37:04):

Speaking of boundaries.

Jennifer Johung (00:37:05):

Speaking of boundaries. Down to that level you're visualizing this… creating, I think, long-term what I would call performance installation pieces where it becomes really hazy and ambiguous where my line and the boundary of my body, and my pet, and my friend, where those occur.

Kathy High (00:37:29):

Yeah, yeah. I think when we started finding out about not just the gut microbiome, but the microbiomes that we have in our skin, everything, I think people's consciousness started to change. Some of you might be too young in the audience who have gone through that actual trajectory of not growing up with that, but for those of us who are... We thought we were human and now we find out we're really not. That was a big shift. And then the other big shift for me, and I think many others, is the fact that we are really porous. There's this sense that, as you're saying, there isn't really the boundaries that we thought we had. We are much more connected not only to each other through many different ways. Yes, the gut microbiome is one of them, that was just one example. But also, we're connected to our environments, that means… That means we're connected to everything around us. And so we should take more care with everything around us, in my mind, hoping that that would become a little bit more of an encouragement for people to think about their environment and what they're doing.

Jennifer Johung (00:38:38):

Right. And so it's not just human to human, human to nonhuman, but human to environment and to other living matter around us. This is actually a question that now I'm thinking of that you mentioned… It was mentioned by Amy in her intro to you. I wondered if you could speak a little bit about NATURE Lab. Now I'm going off track because now—

Kathy High (00:38:56):

No, no, I'd be happy to.

Jennifer Johung (00:38:59):

You brought up the environment, and I know that thinking about this work, I've been focusing my questions on human, nonhuman, cell. But then as you were saying, all of these things are situated in particular sites with their own living matter that encroaches upon our beings and our boundaries and demand things to us. So maybe just a few—

Kathy High (00:39:14):

Okay, so I am lucky enough... I come from Troy, New York. I don't know if anybody knows where that is, but it's near Albany. Yeah, woo, wee. It's near Albany, New York, and north of New York City. About 150 miles. About 20 years ago, a bunch of us rag-tag activist media-makers decided to start a nonprofit organization called The Sanctuary for Independent Media. And out of that, since that time, we have developed a minicampus. It's not associated with the university. A lot of us are university professors, but we're not part of a university. We're separate, which was strategic on our part, but hard because we had to raise a lot of money. But we also got very interested in art, science, and media. But the science part became NATURE Lab.

(00:40:03):

So we bought a building, we started a community bio-laboratory on the first floor that looks at the urban environment of that area and looks at our air, soil, and water. And so we do testing of the river waters from the Hudson River, for example, and we do air monitoring and these kinds of things. We also have another part of the NATURE Lab, which is called the People's Health Sanctuary, which is about alternative health and mutual aid. And so these things are coupled together partly because we took the idea to the community before we started it, and they said, "You can't do the biolab and finding out about lead in our soil without having a way to debrief about it and work through that trauma." And there was a lot of other stuff related to that. So that's where the combination of these two things came about. And it's really quite interesting because it is pretty potent and powerful, I think.

Jennifer Johung (00:40:59):

Right. And it takes the work that you've been doing for many decades now, and it situates it that these are ongoing things within our bodies, outside of our bodies. And again, as you were saying, that our skins are really porous and that we have an impact. And this is maybe my segue to your recent work, which I'm really excited to hear about because I didn't know about it until now, or preparing for this moment, which is about... Because I think that the impact of our environment, there's been research done about how the microplastics we ingest or all these processed foods or what have you, or just our environment impacts our internal gut microbiome. And things might then be off balance because of certain things that we sprayed on our body, ate unwillingly. And I want to think about that or have you talk about that in the context of biofuture. One of your websites is You Are My Future. And with this new project, I did

not know this about vultures. And I'm like, "Oh gosh, now I have to go research. Vultures are weird things. What?"

(00:42:05):

So how are you thinking about biofuture, your biofuture, our biofuture in this context of both what's happening outside of our bodies? And then also what may be missing or absent as a result of that, or maybe just completely not related to that, but what's happening internally—we're missing certain microbes, we don't have the diversity? Where is our future going? Is it this synthetic future where we're seeing all this… you know, the mechanical gut? What does that mean?

Kathy High (00:42:37):

Like many of my stories you've heard me talk about, these works, they evolve over time. For example, I became a bioartist because I had written a script for a film that was a sci-fi musical called *23 Songs of the Chromosomes* in the 90s. And I couldn't raise enough money to get it produced. I decided to take on one of the queer science characters, which is where *Embracing Animal* came from. That was something she was working on, working with rats. And I was like, "Oh, I can do that in real life. This will be great."

(00:43:06):

So in this case, this actually comes from a science-fiction story that I've written also, and it is about the fact that... The questions that are being asked is how are we changing our microbiome maybe so that we're witnessing evolution? Our lives are too short to really see this evolution come to some resolution or final endpoint because we're going to live really a short time, and then the next generation will probably see it or the next one. So I don't know where we're going, but I think we're maybe not asking the right questions about it. So that's why I am trying to do this.

(00:43:43):

And it's going to become a science-fiction film. There's a science research part that you saw, but there's also going to be a film that's being completed. In that, one of the characters does get this advanced synthetic treatment, and it goes wrong.

Jennifer Johung (00:44:02):

Of course.

Kathy High (00:44:03):

Of course.

Jennifer Johung (00:44:04):

Of course.

Kathy High (00:44:05):

But she's able to take it, and I won't reveal the ending of it, but she's able to take the mistake that she inherits from this experiment, because she's in treatment, and co-opt it to be able to

use it with a community that she then fosters. So she's almost claiming the synthetic gut stuff for herself and being able to manufacture it and manipulate it the way she wants to. So I think there will be technology in our future. Whether we have the control over it or not is one of the questions I think we kind of need to think about. Where we're going, it's a little hard to say. I think we might just be mutating.

Jennifer Johung (00:44:49):

Right. I'm again interested in that… the timescale in which these things are occurring, and how do we sense things that might occur beyond our lifetimes? I think across your work, we're starting to see that life keeps going, and at some point it will end, and then maybe some synthetic system will pick up something and extend it. Or maybe not, and that's fine, too. But yeah, spending time with these things and being… spending time with understanding what's happening in different scenarios, I think, becomes incredibly important. And then imagining. I think it's significant, of course, that this work is going to be a film, so I didn't know that. Because you're speculating. It's like what's going to happen? Do you think that there's going to be an embodied installation portion of this, or is it mostly going to be this... the film?

Kathy High (00:45:43):

The film.

Jennifer Johung (00:45:43):

Yeah.

Kathy High (00:45:45):

I would like to do the latter that you mentioned, but at this point I'm waiting to see... What I'm really waiting to see are the results of the experiment because the science team that's working on this in Copenhagen is actually really interested in the project. They decided not to make it a science project, and so they're not doing controls, they're not doing repetitions of the experiment. They're really trying to just see what happens. They're very interested in it. They've actually called it the Art SHIME so that it's not like a science thing. But at the same time, when I went there, they were all really interested in what they're finding within the experiment. It depends on what the results are. They may take it up and go further with it. I'm waiting to see if that happens, and then I will continue with the latter idea that you asked—

Jennifer Johung (00:46:35):

See if there's some, yeah, embodied version of it, because who knows.

Kathy High (00:46:38):

Because we don't know what they're going to do. And then we can continue maybe thinking about how to do that together, me and the scientists. Because we've been working together on this the whole time.

Jennifer Johung (00:46:47):

Right. I'm looking at Emily for time. We got time? Yeah? Okay. Because I feel like maybe I rushed into the questions and I'm realizing now that I would love for you to talk about just how do you start these collaborations with these scientists? Because there's people, they're here, they're in Europe, they're elsewhere. I know when I started researching this artwork, I was flying around the world to whoever was doing this kind… were allowing artists into labs. Seems to be maybe more of them now who are interested and maybe they're seeing some benefits for their own research. So I wondered if you could talk a little bit about how that process has started, what you have learned. And you were saying they're learning a lot, too.

Kathy High (00:47:29):

Yeah. That's a great question. It was asked to me by students in Amy's class yesterday, and it was really generative because, for me, it's a little bit like dating, right, or falling in love or something. You really have to find your partner. You have to find people who are willing to go with you. And if they're not, they're not. It's okay. I don't begrudge anybody, but there are people who are there. And thanks to the conversation for Amy's students, because in that conversation, I began to understand how the scientists are really taking a risk working with me. It's not like I'm that risky, I don't mean that. I just mean that they have such a demand on their time, on their resources, on their labs, to take time away from whatever their current research interests are and mandates from grants and things like that. It's a big deal. So you have to find somebody who's at a point in their career where they can afford to do that is the one thing.

(00:48:36):

And then I also found that in... Because I was introduced to each of the scientists that I worked with through another person who they knew. Now, they may not have known them very well but, for example, Will DePaolo I met in California. I'd had a show at UCLA, and the curator for that show set up a symposium where we were talking together. And afterwards, because I liked what he was saying—because he was working with the human gut microbiome—I said, "Would you have an artist in your lab?" He goes, "I never thought of that." And they said, "Yes," like that. And I was like, "Oh, what have I done?" Be careful what you ask for, because this happened.

(00:49:19):

And the same thing happened, or not the same, but a similar thing happened with Dr. Arumugam in Copenhagen, because I was on a residency with the medical museum called MICRO, The Metabolic Arts Gathering. I was there a lot in 2003 when I had a sabbatical. And I was able to meet this guy because Dr. Mani came in and gave a talk, and I liked what he was saying. And I liked his sensibility. I'm like, "Oh, this guy's kind of a philosopher scientist. I like scientists. I like this." And again, I asked him if he'd be interested in talking about a collaboration… and very humbly went to him and said, "I have this crazy idea about stressors, and do you want to talk about it?" And he immediately got it and he jumped on it. And I was really fortunate.

(00:50:09):

Also, the other thing to remember about doing science is, as artists, we don't have science money at all. We will never get that money. So you have to make sure that that person is willing

to put in their own resources, which is incredibly generous. So the valuable outcome for me of these kinds of collaborations is when I see them taking that information and using it in their further research. Then I'm like, "Oh, this is valuable to you and it's valuable to me." So it's the best.

Jennifer Johung (00:50:42):

That can be a surprise, too. And this is another form of a surprising relationality or new forms of kinship, is working across disciplines. Because in the lab it's like they have these deadlines, they need to meet these things, they need to prove these things. There needs to be an end result. And you may be coming in and saying, "What's going to happen if we make this synthetic gut?" Maybe it's going to be this artwork. And the fact that the matter itself is both inspiring you as an artist, and then also in these moments furthering something that they may not have expected. I think, of course, incredibly generative across the board and then also hopefully leads to more of these kinds of collaborations.

(00:51:24):

And I think my last question to you maybe is a very speculative question, which is where do you see the future of bioart? Are there places, projects that you see around the world that are really inspiring to you right now?

Kathy High (00:51:39):

Yeah, that's a great question. I think there's been a lot of changes in the last 20, 25 years that bioart's been around. A lot, a lot, a lot. I think there's a lot of artists who are working very much in this vein. I think this idea of interdisciplinary teams of people—who include people from different disciplines like science and art coming together—has become an idea that people can wrap their heads around more easily now than it used to be. And I think people are beginning to see the benefit of those kinds of relationships.

(00:52:14):

So people who are working really in a good way right now, I think are not necessarily always working in the lab, they're working across mediums. Sometimes in the lab, sometimes not. There's amazing bioartists in Slovenia, in Ljubljana. There's a group of artists like Maja Smrekar and other people there who are just incredible, working with plants, working with dogs, working with other creatures. And I think their attention to these other beings adds a way that we start to think about how we are in relationship with these other beings ourselves. And that's, I think, the best that comes out of it.

Jennifer Johung (00:52:59):

That's great. And I also like hearing that these are artists who do other things, too. Something that I've been concerned with as an art historian is to include bioart in things like surveys, just the survey of contemporary art. When I started teaching, a long time ago now, you didn't get that. That was in the special arts tech media class. You didn't get that in the overview. We ended with new media art. And I'm starting to see incorporations across lectures, and that's very hopeful to me, too, just to think about the expansion of the field, as well as its inclusion and its dialogue with other forms of art-making.

Kathy High (00:53:38):

Yeah. And I think for me, the reason I got into this whole field is because I saw the bioartists that I was watching back even in the later 90s and into the early 2000s asking the most incredible questions about ethics anybody else was. And I guess I may be more of a philosopher than an artist, because that was really key to me.

Jennifer Johung (00:54:01):

A similar thing happened to me with a background in performance and performance art. It was like I was talking about living bodies, doing things on stage, and then I was like, "Wait a second. There's this whole other form of art making that has really put... It's like bolding and underlining those questions of what does it mean to be alive, what does living mean? Where does it begin, where does it end? So I like that both of us were drawn to this area from these different trajectories and then found this deep seed of questions that continues to provoke us both really to this day, so. Yes. Emily is saying we're out of time. So thank you so much, Kathy.

Kathy High (00:54:36):

Thank you, Emily. Thank you, Jennifer.

Jennifer Johung (00:54:37):

Just very excited to have this conversation that we, I feel like, will continue to talk more, and I will be watching what happens with the vulture project. So, thank you. I think now we have time for some questions, but yay. Thank you.

Kathy High (00:54:51):

Thank you.

Jennifer Johung (00:54:51):

Yay.

Jess Xiao Long (00:54:56):

Thank you, guys. If you have a question in the audience, feel free to just raise your hand up high and I'll come get you the mic. We're also going to have our hotline number up on the screen, but I can read it to you right now, if you want to text in your question. That phone number is (614) 813-3416. So you can text your question in if you don't want to use the mic.

Kathy High (00:55:23):

It's always the awkward moment as you wait. Thank you, yes. Yes, somebody back there... And then we'll come to you, Kris. Oh, wait. Where was—

Jennifer Johung (00:55:33):

He was—

Kathy High (00:55:33):

See the woman in the yellow?

Jess Xiao Long (00:55:35):

Up high, please.

Jennifer Johung (00:55:36):

Yes.

Jess Xiao Long (00:55:36):

Sorry.

Audience 1 (00:55:42):

Thank you. Hi. I think that lecture is very interesting, especially I have a little bit of working experience previous in the healthcare, in the lab, too. There's two questions I'll ask you. You showed the slides about *Blood Wars*. I don't know, I usually just think of the blood cells growing in a petri dish, just kind of added medium, but I didn't see, as you already described to us, how the cells interact [with] each other. My question is the cells that you're growing in the dishes, do you considering what type of blood cells? For example, for the human, we do blood transfusion usually considering the type B, type A, those type blood cells. For the rats' blood growing in the dish, do you considering blood type?

Kathy High (00:57:02):

No, we actually did not consider blood types, although we had hoped that if we kept doing the iterations of the project, we might consider that. No, it was just simply volunteers who wanted to fight each other. And then yes, we separated them. And the white blood cells were put into medium. So you're right. Thank you for mentioning that. I forgot to mention that. That's what kept them alive for the amount of time. And they were incubated while they were being filmed because it was overnight or into the next day. So it was a long period of time. So they were kept warm and fed, and then they died, or killed each other.

Audience 1 (00:57:39):

Okay. I think another question. I think the cells' interaction, usually we don't look at this, just see how they're growing or produce anything. But from your standpoint, show us the blood cell interacting [with] each other. That's very interesting, I think, to look at.

Kathy High (00:58:01):

Thank you.

Audience 1 (00:58:04):

Another question I do have is about bile bacterial group. Because as you mentioned that there's a lot of discussion about bile bacterial groups, and especially when people think in the medical field and in the science biotechnology field, they're considering basically have two group type of bile bacterias. One type is from well-being humans, another type from ill patients. They think the bile bacteria group is totally different. Is that right?

Kathy High (00:59:00):

Yes. When I was working with William DePaolo in his laboratory, Dr. William DePaolo, he and I used our own stool samples. He was the healthy one, he was actually really healthy, and I was the sick one because I have identified Crohn's and other diseases. And he, I don't think, could identify anything wrong with himself. I know it's a very simplistic way of talking about health, I didn't mean to make it so either/or, but we had to do something to do it, to start the experiments. Yes, when we were doing that, we were plating our fecal samples, which by the way, this was the first time his laboratory, and with Dr. Arumugam's team, they knew the identity of the fecal donor, which changes the relationship, I think, to the material in an interesting way. That was really funny to talk about them, all of Dr. William DePaolo's team were giggling like, "We're handling our boss's poop. This is really awkward." They didn't care about mine, it was his, like...

(01:00:10):

But yeah, we did see... Because we were using very different petri types... I mean agar types, sorry, in these petri dishes. The agar, which expresses different kind of bacteria in each type, had really almost similar-ish results, only in that Will DePaolo's side, the healthy guy side, had a lot of bacteria showing up in those plates, those petri dishes. And mine were repeatedly empty, empty, empty. So that was a visual for me. As a patient, this is really interesting to have something as evidence in front of you that's so visual and so easy to read because I'm not that smart. I'm like, "Come on, here we go. Oh, it's empty. Okay, I got it." And it was a real clear signal that this could be dysbiosis. So it really made it click in my head. I had been told this before that I had dysbiosis. It didn't mean anything to me. It's the way to translate it, I think, is what I was trying to do. Thank you for your question.

Audience 1 (01:01:17):

Thank you so much. It's good to see an artist work with biotechnology.

Kathy High (01:01:23):

Thank you.

Audience 1 (01:01:23):

Thank you.

Jess Xiao Long (01:01:26):

All right. We got some great questions on the hotline. Thanks for texting in. Someone from the crowd asks, "Could you talk a little bit about how you use disgust as a strategy in your work?"

Kathy High (01:01:39):

That's a great question. You want to talk about? No.

Jennifer Johung (01:01:41):

No.

Kathy High (01:01:44):

So I think by default, anytime anybody's working with shit, it's going to be put in that category of disgust. I'm also really interested in death and also beginning to work on death stuff. So there you go again. It's a complicated question to answer, and it's a really good one. I think that oftentimes there are a lot of things that we ignore, or make fun of, or are ashamed of because we don't want to look at it square in the face. And I think that some of the shame that we have, for example, around shit has all kinds of complicated histories as to how that's changed over time and how we think about that. And some of it is very much culturally based.

(01:02:40):

I was looking at a book called *The History of Shit,* by Dominique Laporte, which he was a French philosopher who's kind of crazy and great. He really wrote about the growth of capitalism, colonialism, and disgust or shame around shitting because people started having their individual cesspools, their individual privies and this kind of thing. And there was no more kind of communal… I know we don't want poop in our septic system, I mean in our water systems. I understand it's about health, but also there's something that started to shift differently at that moment.

(01:03:22):

So I think what I'm trying to do in my work is look at what are the histories around the ways we think about these things, how they changed. I'm not necessarily trying to get back to something better, but just to understand how we approach these things and maybe shift. Maybe I'm lying, maybe I do want to shift consciousness a little bit.

Jennifer Johung (01:03:45):

To create different relationships to these things that we separate ourselves from. Because what you're saying, is that there's these boundaries and what we think of as private or public with pooping or whatever. It's like, I have young kids, it's like I talk about poop all the time. And then at a certain point in time, it's like you're not asking your 15-year-old, "Did you poop today?" Whereas I'm asking my five-year-old, "Did you poop? How was your poop?" But there's also, yeah, as you were saying, longer histories of what do we do by ourselves? Where do we do it? Is it connected to us? And that by reversing or playing with the emotion of disgust is also another way to bring people into this and to create a different form of relationality too, I think.

Kathy High (01:04:27):

Totally. Great, thank you for that.

Jennifer Johung (01:04:31):

Talk about poop anytime.

Jess Xiao Long (01:04:34):

Okay. We got some more hotline questions. Someone asks, "Wondering if you have further thoughts on the human connections to vultures vis-a-vis recent headlines about vultures becoming endangered or extinct?"

Kathy High (01:04:48):

Yes. Thank you for mentioning that. It's actually really important. Okay, I am a big vulture fan. I really do admire the work that they do. And I think that we all have to understand that without vultures, we are a little bit in trouble because they're the biggest clean-up crew we have, and they do it more efficiently than rats and dogs and other creatures that would substitute if they're gone. There's been all kinds of problems with vultures. Yes, in different parts of the world they are really threatened and going extinct for different reasons. For example, in India, the cows are given an anti-inflammatory drug that once the vultures eat those dead cows, it kills them. It basically just wrecks their system and they die.

(01:05:35):

And I think vultures are really hated because they eat dead things, rotting food. They have this weird bald head. They vomit on people if they get too close. They can be really toxic. But I also think that they do the work that we really need to think about and appreciate. That's a bunch of the reasons why, but I could go on. When I get deeper into the vultures, I really want to find a vulture scientist and team up for a while and really figure out more about vultures. I think they're really fascinating beings. They're very social. Lots of good things. So, thank you. Yep, thanks for bringing that up. Support vultures.

Jennifer Johung (01:06:20):

Does anyone know a vulture scientist? I'm just like, "Ooh, not me."

Jess Xiao Long (01:06:24):

Anyone else in the audience want the mic? Yeah?

(01:06:30):

Excuse me, sorry.

Audience 2 (01:06:37):

I know you talked a little bit about identity and queer identity and gender identity. I was thinking about knowing these things about yourself that most people don't know, like the bacteria that's within us, things that I wouldn't even know how to define or people 100 years ago wouldn't even know existed. So how has knowing these things about these inner parts of life either maybe affected your identity or changed the way you think about yourself? I feel like for me, it would give an uncomfortability—I wouldn't want to know these things—but it seems like you're inclined to. So what drives that and how does it make you look at yourself differently or not?

Kathy High (01:07:15):

Yeah, that's a great question. I think it's good to understand that I came to this through the medical system because I was grappling with the medical system for a long time with my

Crohn's disease. I think our medical system's awesome in some cases, but it's not great with chronic diseases, which I think many of us understand who have either autoimmune diseases or whatever that are... Long COVID or whatever. It's just not built for that. And so I was in a relationship with the medical system of, I don't want to say adversity, but trying to figure out something alternative from the get-go, from a very early age. So I made films about women as patients in the 80s and 90s, and then from there moved into bioart stuff. So I think I had a curiosity about how our systems work and how we can think about them differently for a long time.

(01:08:16):

And then in terms of how it affects my identity, it's hard for me to answer that off the top of my head. I am really grateful for the kinds of things that I've been able to figure out and find out. It's helped me with my teaching, I think, because I can teach more about environmental work and other kinds of ways of looking at the world through these... Not just my work, but other bioartists' works and other ecological artists' works, in terms of how they investigate their relationship to the world and to ecologies and to each other. And I think that that's something that has been really important to me. And I think that's also come out of the work.

(01:09:06):

In terms of my own identity, I'm a Scorpio, so I do like the dark side. I think that's part of it, I can't help it. I've always been thinking about death since I was very young, and body stuff, I think, in a way that's not really roses and happy kittens, although I have happy kittens, so. So I'm not trying to skirt your question, I don't actually have a great answer off the top of my head. I hope I gave you something... Thank you.

Jennifer Johung (01:09:43):

It's also, like you were saying, your experience with the medical system. It's also about the way the systems and structures that allow us to understand our own bodies, and that you have found through these works a different way of understanding not only your body, but other bodies too. We're used to certain frameworks that allow us to understand certain things. Certain things are off limits. So that I find interesting too, that art and art practices have a place at the table alongside these other disciplines that are telling us how we work, or what goes on, or what could go wrong. Like you were saying, somebody says dysbiosis, and you're like, "Okay?" But then if you see this, it makes a different kind of sense. So I find that very interesting and important.

Kathy High (01:10:25):

Yeah. No, that's a good point. I think the other thing is too, we're in relationship. I think this is really what you're saying, too, and I love that. We're in relationship with a lot of beings in this world, not just us. Humans, yes, but a lot of other creatures and things and entities. And I think to come to terms with the fact that we're not the exceptional ones is really important and that we're part of a big, big, big mess. And that's the way it is.

Jennifer Johung (01:10:54):

Yep.

Kathy High (01:10:56):

I don't know, maybe that's where we end.

Jennifer Johung (01:11:00):

Messiness.

Kathy High (01:11:01):

Oh wait, Kris has a...

Kris Paulsen (01:11:08):

I wonder if you could talk a little bit about how you think maybe the reception of bioart has changed over the last 20 or 30 years. If I'm thinking back to the 1990s, tons of controversy. In the early 2000s, even people getting arrested as potential terrorists because they were ordering medical equipment that it seemed like only scientists should have. I see in your work, especially the recent work, a lot of interest and positive feelings, but also maybe not doing the other thing, which sometimes happens, which is when someone is being critical of a normative practice and bringing it into the gallery, they become the target like, "Oh, animal research, you're an animal researcher. You're the bad one here." Rather than calling attention to maybe unethical practices that happen behind closed doors. So I'm wondering if you could talk a little bit about if or how you think public reception of bioart has changed over the last 20 or 30 years.

Kathy High (01:12:18):

Great question, thank you. When I showed *Embracing Animal* at MASS MoCA, there was another artist, Mark Dion, who maybe some of you know, he's a great artist, was also showing work with live birds in it. We were called out by the Humane Society as cruel to the animals for having them on exhibit. And we met with the Humane Society and had to explain our projects to them as to why we had them to get their endorsement for the project because Nato Thompson, the curator, felt this was really important. And they finally came around. But it was really interesting to be called out in the way that you're talking about.

(01:12:58):

And the other person you're talking about here is Steve Kurtz in The Critical Art Ensemble who had a really amazing exhibition in 2004—I think it was at MASS MoCA, actually, the same institution—And they were showing a project that was going to test for whether your organic food had any GMOs in it. And one of the ways that those artists were going to test things was using a kind of bacteria, which is so ubiquitous and so common and used in high school laboratories, but they found it in his... It was a very complicated scenario. His wife died and then the police came and then they found petri dishes, and they found the advertisement for the show, which had Arabic on it, and they thought he was a terrorist. Like, boom. And it was really creepy. He went through 20 years, not 20 years I don't think, maybe it was.

Jennifer Johung (01:13:56):

It was. It was, right?

Kathy High (01:13:56):

It was.

Jennifer Johung (01:13:56):

It was ongoing, and they kept reducing the charges.

Kathy High (01:14:01):

A trial. What has happened since then—and one of the things I'm really working with are biohackers, people who are doing more DIY bio stuff on their own—citizen science. I think all of us need to be really doing science. I really do. I'm not a scientist, but I really do think all of us need to know this and do it so that we understand it. Even the FBI admitted that they had made a mistake in the Steve Kurtz case because they realized that biohackers, for the most part, are not interested in becoming terrorists, and they're really interested in trying to fix things, or find out more about life, or all kinds of things, but not necessarily that.

(01:14:45):

But you're right, things have really changed. I think curators have changed because they've become more flexible in terms of trying to deal with this complicated question of having living things in their galleries. And also there're more biohacker spaces around the country and around the world that are really prominent and really ongoing, and now they've been there for 15 years or so. And so I think that's adding a level of it. And the FBI people became embedded in these biohacker spaces—like Genspace in New York City and BioCurious in San Francisco—and they would watch what's going on. But they also learned from doing that. They learned that they'd made a mistake.

(01:15:29):

So you're right, it's really different moment. It was really scary. Steve got really shafted for the whole situation. I don't know if you want to add anything-

Jennifer Johung (01:15:38):

Yeah, no, I will just say that there's a documentary film based on this, *Strange Culture*, Lynn Hershman Leeson. And actually watching that is what started my own path down researching it, because I was teaching, and I was like, "Oh God." I think it was the end of the semester, and I needed to give a lecture. And my students were like... And I was like, "Dangerous art." And I show this, and then I realized there's not a lot of writing about this. Yeah, that was a moment. And also just when you put up the slide of the ear mouse. Amy and I were just saying like 10 years ago, everyone would be like, "Oh my God, what is that?" The people would be shocked. And now we're like, "Yeah, yeah, it's a nude mouse with the ear on its back." So even just that change is really interesting.

Kathy High (01:16:22):

Yeah, think about that. Think about things that used to shock you and then what doesn't now. We become very used to these shifts, and I think we have to watch ourselves in some way.

Jennifer Johung (01:16:36):

And the question of whether something is real and living versus a generated image is also... I think people now are just like, “Ah, it’s real. It’s not real.” But this thing was living, moving, breathing, died.

Kathy High (01:16:46):

I think Emily’s getting anxious. We have to go.

Emily Haidet (01:16:52):

No, I just want to thank you both for such an incredible conversation. I have like 1,000 more questions, so thank you both to Jennifer and Kathy.

Kathy High (01:17:05):

Thank you all.

Emily Haidet (01:17:06):

And thank you all for coming. Hopefully we’ll see you. I think our next artist talk is Woody De Othello at the end of March, so hopefully we’ll see you there. Thanks.