Interview with Danielle Parsons

Title of work: *+Untitled+*

Additional collaborators and contributors:
Rob Racine, art projection technician
Goodfellow Advanced Materials, microfabricated slides with smallest plus pools.
Stencil Ease, made custom laser-cut mylar plus's and plus pools
General Oceanics, donated a 10µm plankton net
Miami Aqua-Culture, donated a yard of 40 micron mesh.
New York Microscopical Society, lent a low-magnification objective lens
BioBAT Art Space, materials support for projection

Microscope & techniques used:
Compound light microscope, an Olympus BX-51
Darkfield microscopy
Polarized light
Panasonic Lumix camera

1. **Can you tell us about the concept behind the installation and what first drew you to working with microscopic life from the East River?**

DANIELLE: I was drawn to the idea that the future + POOL will float within a living ecosystem that most of us never see. The East River can appear as a surface — a backdrop to the city — but under the microscope it becomes a world unto itself, filled with organisms carrying out countless processes that support the health of the waterway. The installation brings those invisible inhabitants into view.

The plus sign became a natural visual framework. I began creating tiny plus-shaped environments and filming microorganisms swimming through and around them. The result connects the future pool to the microscopic life already present in its waters, creating a meeting point between human design and the larger ecological systems that sustain us.

The plus signs were so small that they helped bridge the gap between the human world and the microscopic one. Working with them reminded me just how tiny these creatures are, and yet how much activity, complexity, and agency exists within their world.

My concept for the video involved something I've wanted to do for years which is to design microscope slides with custom designed chambers in which the action unfolds. I love the plus sign. It's so positive, active, and bringing things together into a sum. Bringing the plus symbol into the microscopic realm encourages a direct, positive connection between viewers

and the lively microscopic world in the East River. New York City is bustling on the sidewalks and under the water.

In my work, I deal with wonderful things, beautiful things. I avoid ugly things, scary things. Like many do, I am deeply affected by the environmental crises unfolding. I also have seen that people avoid the pain of confronting climate grief. More people will connect with science when it's appealing. Science literacy is important. Once people care about something, they'll protect it. Wonder is a pathway to stewardship.

This is one reason why I resonated with + POOL's mission. It's inherently positive, and fun – a swimming pool is the very definition of fun. And yet the initiative is proving that our urban waterways are not beyond hope, just the opposite. The water can be filtered, without chemicals, and become safe to swim in.

For the past year, I've been an artist-in-residence at BioBAT Art Space, located in the Brooklyn Army Terminal on the waterfront of New York Harbor. Much of my previous microscopy work focused on freshwater organisms, but being surrounded by harbor water every day naturally drew my attention to the life just beyond the pier.

I collect samples using a plankton net and bring them straight upstairs to my studio laboratory. This routine has earned me curious looks from the people fishing nearby. The organisms living in these brackish waters are noticeably different from the freshwater species I'm accustomed to seeing. Both the animal-like and plant-like organisms seem tougher somehow, which makes sense given the strong currents and constantly changing conditions they inhabit.

For this project, I've been particularly interested in the microscopic life of the East River. Despite its name, the East River is not a river but a 16-mile saltwater tidal strait that connects Upper New York Bay to Long Island Sound. Freshwater drains into the East River too, making the water brackish, saltier than freshwater but less so than ocean water. Its currents flow in both directions, reversing multiple times a day.

As a child, I sailed around New York Harbor with my father on his sailboat. He often remarked on the changing currents of the East River, and I remember sailing under huge bridges past all the incongruous skyscrapers. My father became intensely focused when he navigated us through Hell Gate, the narrow tidal strait at the north of Manhattan and Queens.

Collecting samples from Pier 35 for this project, I found myself thinking about those trips. The currents tugged so hard on my plankton nets that at times it felt as though I were reeling in a shark.

One unexpected outcome of this project has been a renewed sense of astonishment at the scale of the microscopic world. As someone who spends countless hours at the microscope,

it is easy to become accustomed to seeing what is normally invisible. You place your eyes to the eyepieces, move from a 4x objective to a 10x, a 20x, or even a 100x, and enter worlds that most people never encounter.

Working with the miniature plus signs created for this project changed that experience for me. The tiny chambers and symbols gave me a physical reference point that bridged the gap between our human scale and the microscopic realm. Watching rotifers, plankton, and other organisms move through and around these incredibly small plus signs made me newly aware of just how tiny these creatures are. Because I could hold the plus sign in my hand and understand its size, I could better grasp the scale of the organisms themselves.

In a sense, the plus signs became a bridge between two worlds. They transformed the microscopic from an abstract place seen through a lens into something connected to our everyday experience. The project left me with a deeper appreciation for the richness of life unfolding at scales far below our perception, and a renewed amazement that entire dramas, ecosystems, and communities exist within spaces so small they can easily fit inside the stroke of a tiny plus sign.

2. **Many New Yorkers only experience the river from the surface. What surprised you most when you looked at these waters under a microscope?**

DANIELLE: Sometimes looking at these waters under the microscope, I couldn't believe what I was seeing was real. There are surreal lifeforms under the surface.

What surprised me was how alive the water is. A sample that appears murky or unremarkable to the naked eye suddenly reveals an entire community of organisms — copepods, ciliates, algae, diatoms, and countless others. Some are hunting, some are grazing, some are drifting. There is constant motion and activity.

The experience is a reminder that ecosystems don't begin at the scale we typically notice. They begin much smaller. Looking through the microscope, the East River transforms from a body of water into a living world.

3. **How did you collect and select the organisms and imagery that appear in the final piece?**

DANIELLE: I collected samples directly from the East River using plankton nets at locations near the future + POOL site. I also sourced marine organisms from a biological supplier, so I could craft a realistic and aesthetic world to magnify the wonders of an aquatic microcosm. Back in the studio, I examined samples under the microscope and selected organisms based on both visual interest and ecological diversity.

I caught them from the East River in nets with very small holes. To catch larger

microorganisms, including the shrimp-like copepods, I made a DIY plankton net using a 2-liter soda bottle, a knee-high stocking, hole-punch, rope, and some duct tape. Smaller microorganisms fall right through a stocking mesh. To catch those, I was grateful for the donation by General Oceanics of a 10micron plankton net. I trawled the net in the water for about 20 minutes and caught thousands of little creatures. The current in the East River one time was so strong I felt like I was trying to reel in a giant shark. Not that I'd ever try to catch a shark. When I was done filming, I poured my samples off the Brooklyn Army Terminal Pier, back into New York Harbor. So hopefully the organisms could enjoy the rest of their lifespan, generally between a couple weeks to months.

4. **What was it like collaborating with Rob Racine on a project that sits at the intersection of science, technology, and art?**

DANIELLE: Rob brings deep expertise in museum projection and installation, which allows the microscopic imagery to exist at an architectural scale. My work begins with organisms measured in microns, while his work helps transform those images into an environment people can physically enter.

It's a satisfying collaboration because both of us are interested in creating experiences that change perception. The technology serves the larger goal of helping people encounter something they might otherwise never notice.

5. **Your work often reveals worlds that are normally invisible. What do you hope people discover when they see this installation?**

DANIELLE: I hope people discover that the invisible world is not separate from their lives. These organisms are not exotic lifeforms from somewhere else; they're living in the waters that flow through our city every day.

I also hope people discover beauty in unexpected places. The East River is often discussed in terms of infrastructure, transportation, pollution, or development. Under the microscope it becomes something else entirely — a place of extraordinary complexity, vitality, and wonder.

6. **How does this project change the way we think about the East River and its ecological health?**

DANIELLE: Environmental conversations often focus on what is wrong with a place. This project begins from a different starting point: what is already alive there. The microscopic organisms in these images are evidence of an ecosystem functioning every day. They remind us that the East River is not an empty channel flowing through the city. It is habitat. It is community. It is a living system. By making that life visible, I hope the project encourages people to think of ecological health not as an abstract environmental goal, but as something tangible and already present.

7. **+ POOL's mission is built around reconnecting New Yorkers with their waterways. How did that mission influence your creative approach?**

DANIELLE: What resonated most with me is that + POOL isn't simply creating a place to swim. It's inviting people into a new relationship with the river.

My contribution became an attempt to deepen that relationship by introducing viewers to some of the river's smallest residents. Microorganisms are easy to overlook, yet they are essential participants in nutrient cycling, oxygen production, food webs, and water quality. By making them visible and larger than life, I hope people feel a greater sense of connection not only to the water itself, but to the living community within it.

I always want to expand and deepen the public awareness of the microscopic world. It's everything we depend on, and it's super beautiful and fascinating to see. So the opportunity + POOL provided was very appealing. I had a wonderful time working and interacting with the people at + POOL. This is a great group of people.

8. **Was there a particular microorganism, pattern, or image that became especially meaningful to you during the creation process?**

DANIELLE: I just couldn't get enough of the copepods. They are the larger bright orange crustaceans. They were so much fun, the way they pop around the slide. They were the best kind of camera hogs too because for some reason they were attracted to the light shining from the condenser, right where my camera was recording. So they would actually swim into the frame.

9. **The installation transforms scientific imagery into an artistic experience. How do you balance scientific accuracy with artistic expression?**

DANIELLE: I don't see those goals as being in opposition. The organisms are presented truthfully; nothing is digitally invented. The artistic decisions come through framing, scale, pacing, and context. Art allows me to create an emotional and aesthetic encounter with the material, while science provides the subject matter and the means of observation. Ideally, each strengthens the other. Scientific accuracy grounds the work, while artistic expression invites people to spend more time looking and wondering.

10. **When guests leave the gala after experiencing this work, what feeling or idea do you hope stays with them?**

DANIELLE: I hope guests leave the Gala feeling as though they have spent an evening inside an underwater micro-aquarium. I would love to have encouraged an appreciation for microorganisms as living beings going about their lives. Big and small, we're all just hanging out here on earth, you know?

The projections in the main dining room will span 40-50 feet, and the shots play out for minutes on end to really invite people into what's going on in there. I hope people leave with a renewed sense of wonder.

11. If the microscopic life featured in this installation could tell New Yorkers one thing about the future of the East River, what do you think it would say?

DANIELLE: If this installation could teach New Yorkers one thing about the future of the East River, it's that everything depends on these microorganisms. There's a lesson of togetherness with all the life forms that live in the river. It's that the microscopic lifeforms in the river are our allies. Yes, sometimes these creatures cause problems for us, but I would love for people to learn how much good they do, and how essential they are to a healthy future for the East River. These are the water filterers, oxygen producers, carbon sequesterers, and the foundation of the entire food web.

The future of our waterways depends on more than engineering alone. It depends on living systems. The organisms in this installation are not merely subjects of observation; they are active participants in the health of the river. If people leave feeling curious, amazed, and a little more connected to those hidden forms of life, I'll feel the work has succeeded.