Molecular Gardening

Written by

Joshua Huang, Merry May Ma & Jessica Yue Wang

Directed by Merry May Ma

Genre: Fantasy/Drama/Romance

Language: English/Chinese

Estimated Total Running Time: 90 minutes





LOGLINE

A chemical-engineering PhD student is stuck in her research but a chance encounter with a mushroom musician reveals an unexpected discovery hidden in the nano-landscapes.







Treatment

JINGMEI (23) is a 3rd year PhD international student in UCLA chemical engineering lab and she is committed to discovering a unique structure from organic semiconductor crystals to maximize solar cell conductivity. But she struggles to meet the expectation of Principal Investigator DR. LEE (45) who pressures her to get results before an approaching grant submission deadline.

One day, on the brink of a break-down, she receives a call from a SCAMMER which turns out to be her old friend KATE (28) from college. Kate just moved back to LA and invites Jingmei to experience a one-of-a-kind mushroom music showcase and they prepare for an EPIC multi-mushroom dinner together. While Kate shows Jingmei her mushroom garden and how to create mushroom music using a synthesizer, Jingmei realizes Kate is more than a friend to her.

As Jingmei goes back to her lab, she tries to enjoy the process more and gives her samples more time to burgeon. But it's a long process and she struggles to find time to connect with Kate, who mistakenly thinks Jingmei isn't interested in her. Their miscommunication escalates and the sudden LA fire destroys almost everything Jingmei's created. Kate shows up and showers her with love and they travel to Oregon together to recover, where their love burgeons. Jingmei learns to pick and grow mushrooms, make mushroom music, and think like a mushroom. When she comes back, the surviving nano-landscape also reveals its magic to her — a tall nano-flower in full blossom.



JINGMEI



23. Chinese, a pragmatic workaholic and a devoted chemical engineer. She is quiet, introspective, focused, and imaginative. As an implant from Taiwan to Los Angeles and a 3rd year PhD student, she is still looking for her place and community.

Her goal is to discover a unique structure in a semiconductor building block so as to maximize solar cell conductivity and help make the Earth a cleaner place to dwell on. She is so laser-focused on achieving her goals and what's visible that she sometimes skips meals, stays up, and ignores everything else in her life.

KATE



28. Chinese American. is an idealistic dreamer. a day-time mental health counselor and night-time-mushroom musician. She is a queer. quippy. and committed "mushroomania" who plants all kinds of mushrooms in her own bedroom of her cabin in the woods.

She was inspired to pursue music instead science. technology. engineering. and mathematics (STEM) in college after listening to Jingmei's advice. She is glad she is doing both now.

She aspires to create art that can help herself and others see the unseen/invisible. hear the unheard. and be more connected to the nature and the worlds around us.

DIRECTOR'S STATEMENT

Jingmei's emotional journey shifts from being frustrated to joyful and empowered. as she is inspired by her whimsical mushroom musician friend Kate to be more patient and faithful like a gardener who believes in what she planted. Throughout the journey. Jingmei and Kate discover that they're more similar than different and they have each other when marching forward. Like William James says. "We're like islands in the sea. separate on the surface but connected in the deep."

As an international student from Shanghai. I have experienced isolation and loneliness due to being far from home. Thus. having a community is crucial for my mental health and sometimes. a profound conversation with a friend can give me so much strength to carry on especially in face of obstacles. Thus. I hope to celebrate the transformative power of meaningful human connections as well as showcasing all these beautiful micro-moments that shouldn't be taken for granted.

I'm co-writing the script with a UCLA alumni. who discovered the ONE-AND-ONLY nano-flower👇



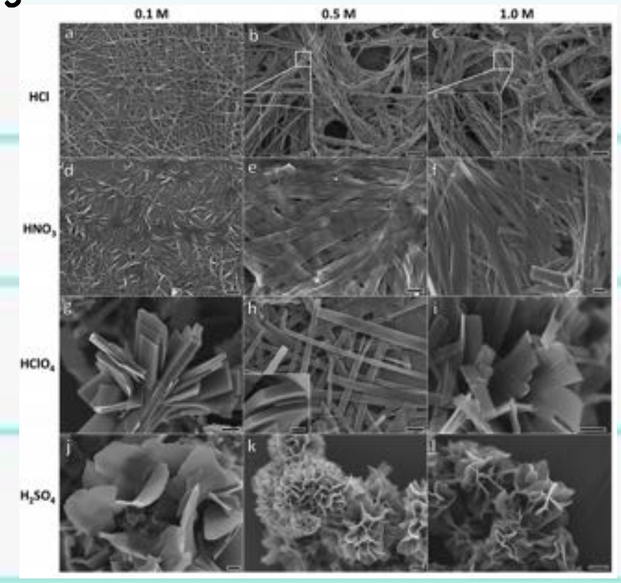




The story is inspired by Dr. Jessica Yue Wang's research on synthesizing organic semiconductors and her breakthrough in growing nanoflower-shaped tetraaniline crystals for the first time. Her discovery of the one-and-only nano-flower reminds me of a quote "有心栽花花不开，无心插柳柳成荫/If you plant flowers intentionally, they will not bloom; if you simply spread willow seeds, they will create shade." Inspiration often comes from unexpected places and people, and the best ideas burgeon when you least expect them. Moreover, the beautiful nanoflower testifies that "science is art".

What fascinates me is the parallel between mushrooms' mycelial networks with the nano-landscapes and the inexplicable connectedness between all existences. The more I begin to see the unseen and hear the unheard like Kate, the more I believe that everything is connected in mystic, beautiful ways.



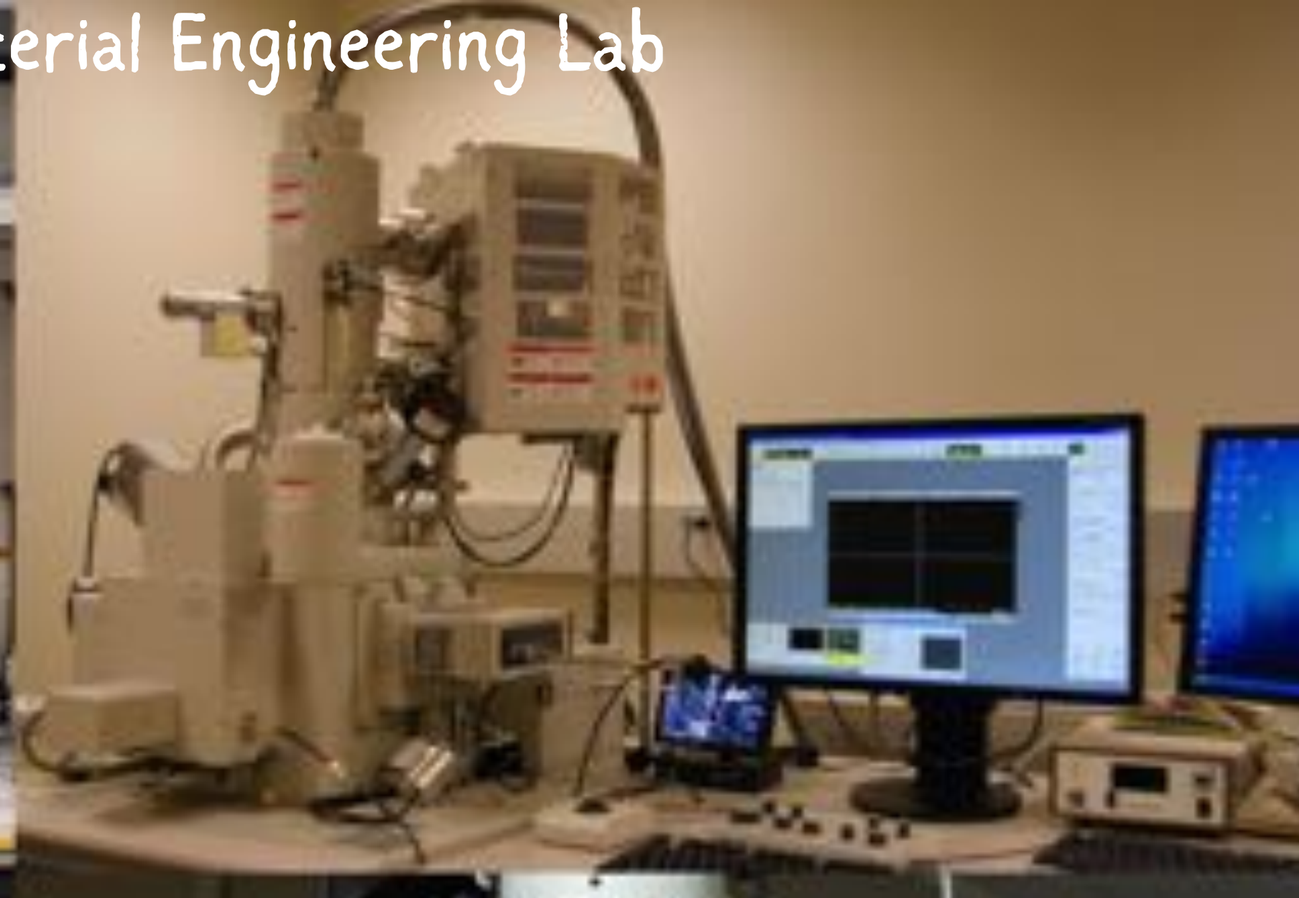






Location: UCLA Material Engineering Lab









Location: Kate's Mushroom Music Showcase



"Jingmei looks at the broken traditional Chinese vintage radios on display. A little lamp emits orange light next to the radio. Oyster mushrooms fill in the gaps of the vintage radios, as if the radios are being slowly decomposed by the oyster mushrooms. Dirt and rocks surround the broken radios."















Location: Kate's Cabin





Cinematography:
Tactility of Food-Making













Tactility of GARDENING

"Jingmei caresses the tops of the mushrooms."

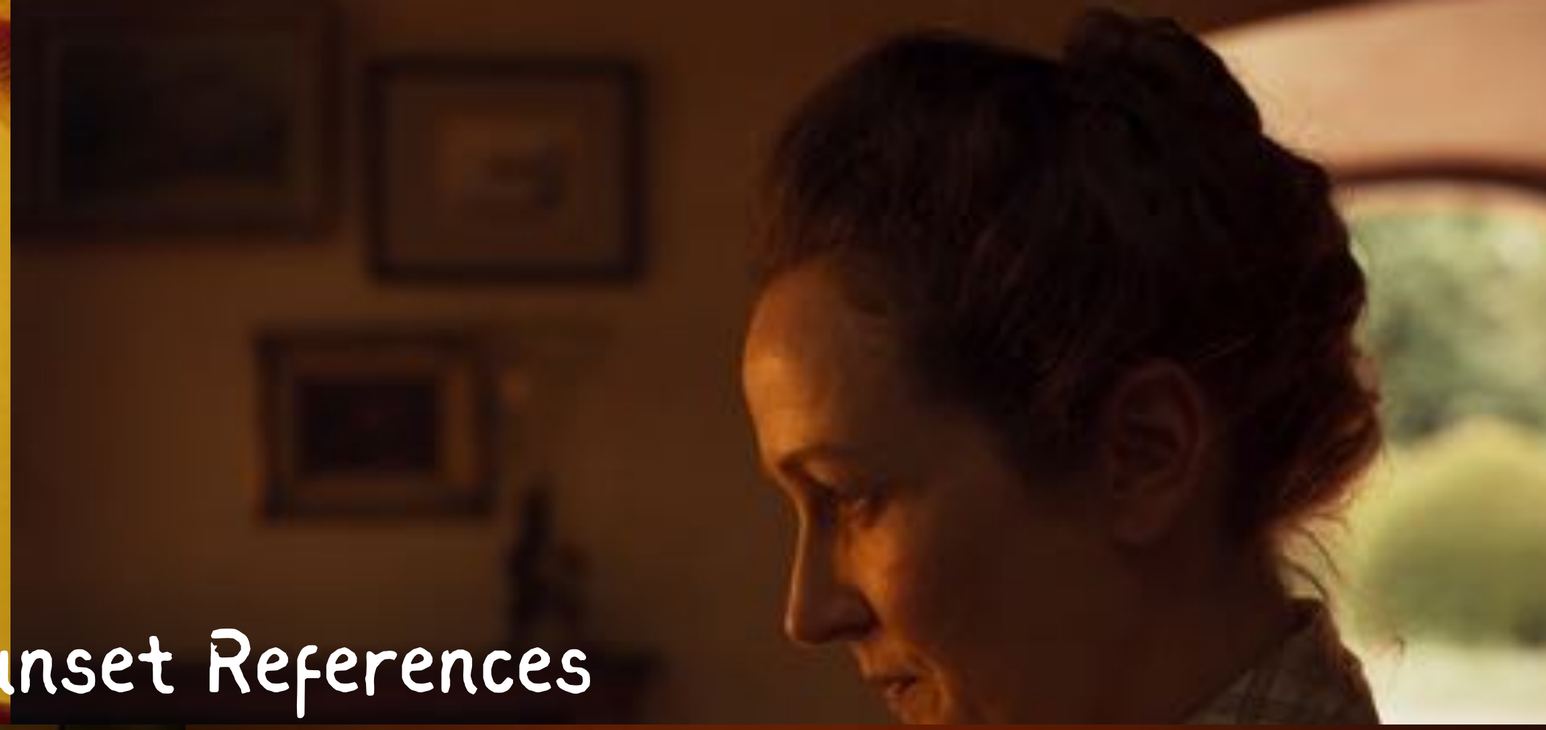
"Kate sprays some mist onto the mushrooms which are not fully grown yet."





Sunset References

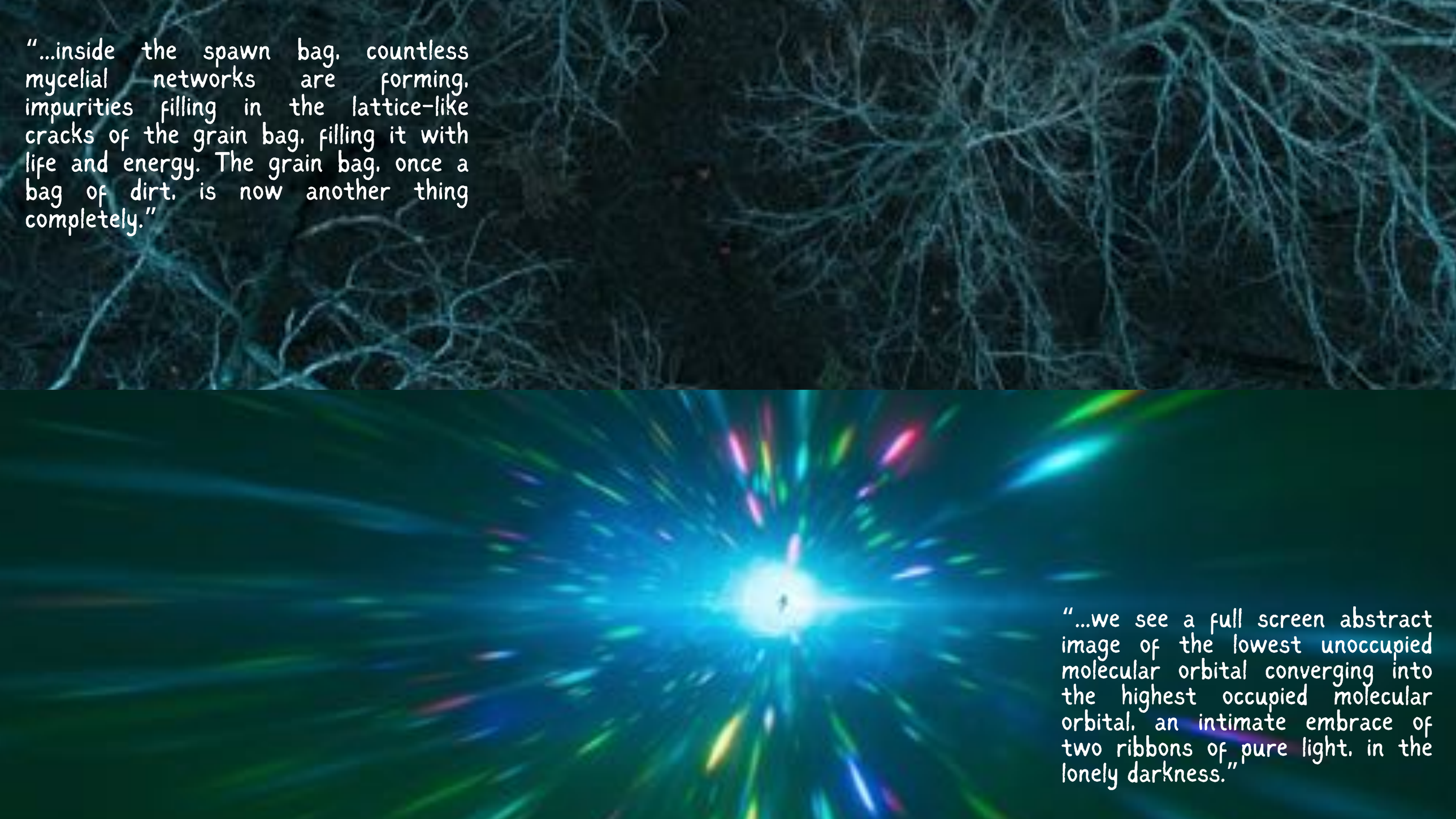









"The mushrooms on Jingmei's windowsill are growing bigger and bigger under the gentle hum of the moonlight."
"A full screen of a light blue liquid diffusing into a light green."


"...inside the spawn bag. countless mycelial networks are forming. impurities filling in the lattice-like cracks of the grain bag. filling it with life and energy. The grain bag. once a bag of dirt. is now another thing completely."
"...we see a full screen abstract image of the lowest unoccupied molecular orbital converging into the highest occupied molecular orbital. an intimate embrace of two ribbons of pure light. in the lonely darkness."


"She runs into the bush and brushes the leaves on her sides. Music flows."





"Suddenly, something bright lights up her face, making her look up."









Color Palettes of The Nanolandscape

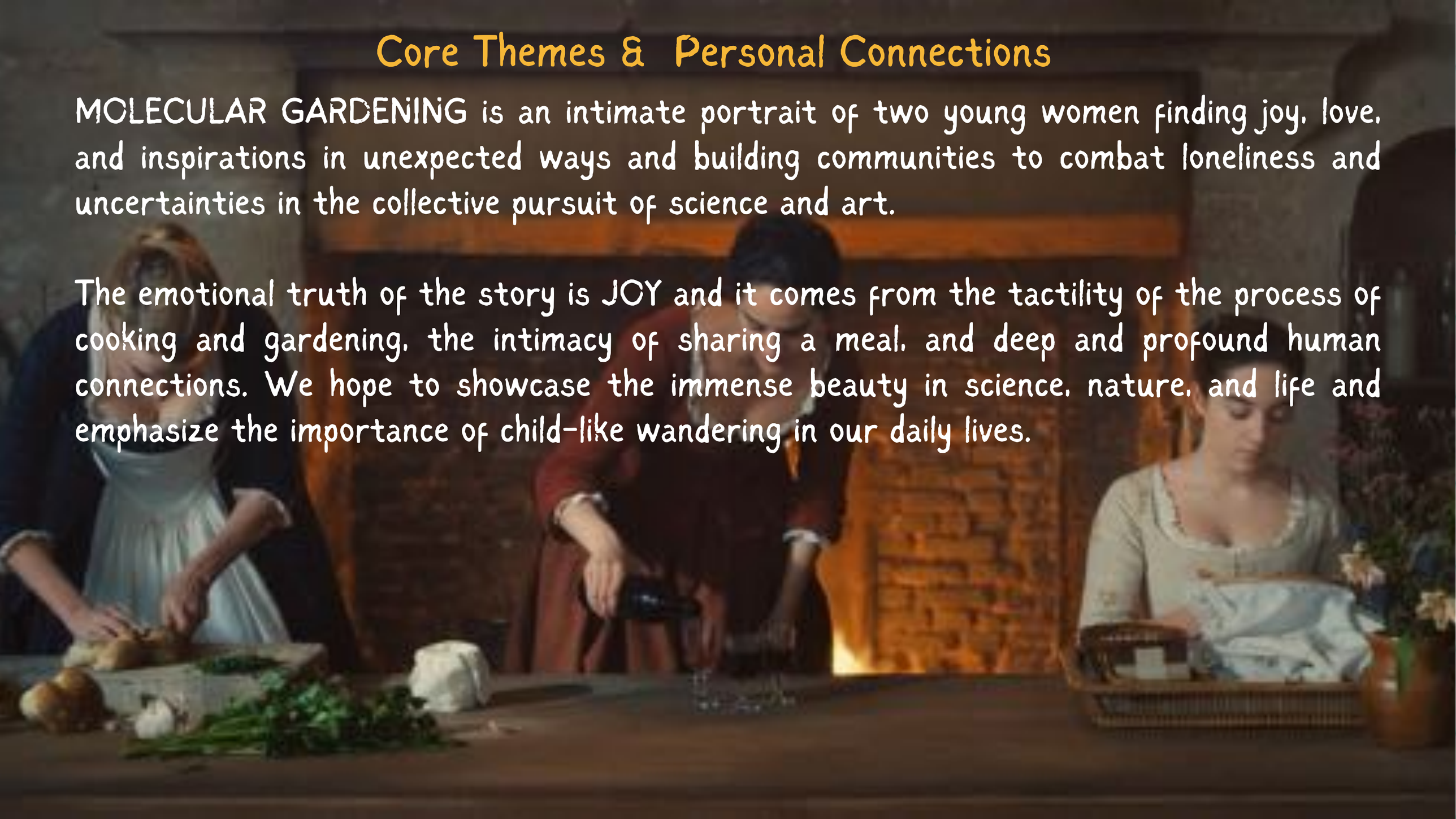




Core Themes & Personal Connections

MOLECULAR GARDENING is an intimate portrait of two young women finding joy, love, and inspirations in unexpected ways and building communities to combat loneliness and uncertainties in the collective pursuit of science and art.

The emotional truth of the story is JOY and it comes from the tactility of the process of cooking and gardening, the intimacy of sharing a meal, and deep and profound human connections. We hope to showcase the immense beauty in science, nature, and life and emphasize the importance of child-like wandering in our daily lives.



Reference Films

PORTRAIT OF A LADY ON FIRE (2019)



MEMORIA (2021)










Castle in the Sky (1986)


Fairy-Tale


My Neighbor Totoro (1988)


References


There are moments in moist love where heaven is jealous of what we on earth can do🍄❤️.
— Hafiz