

Speculative Surfaces

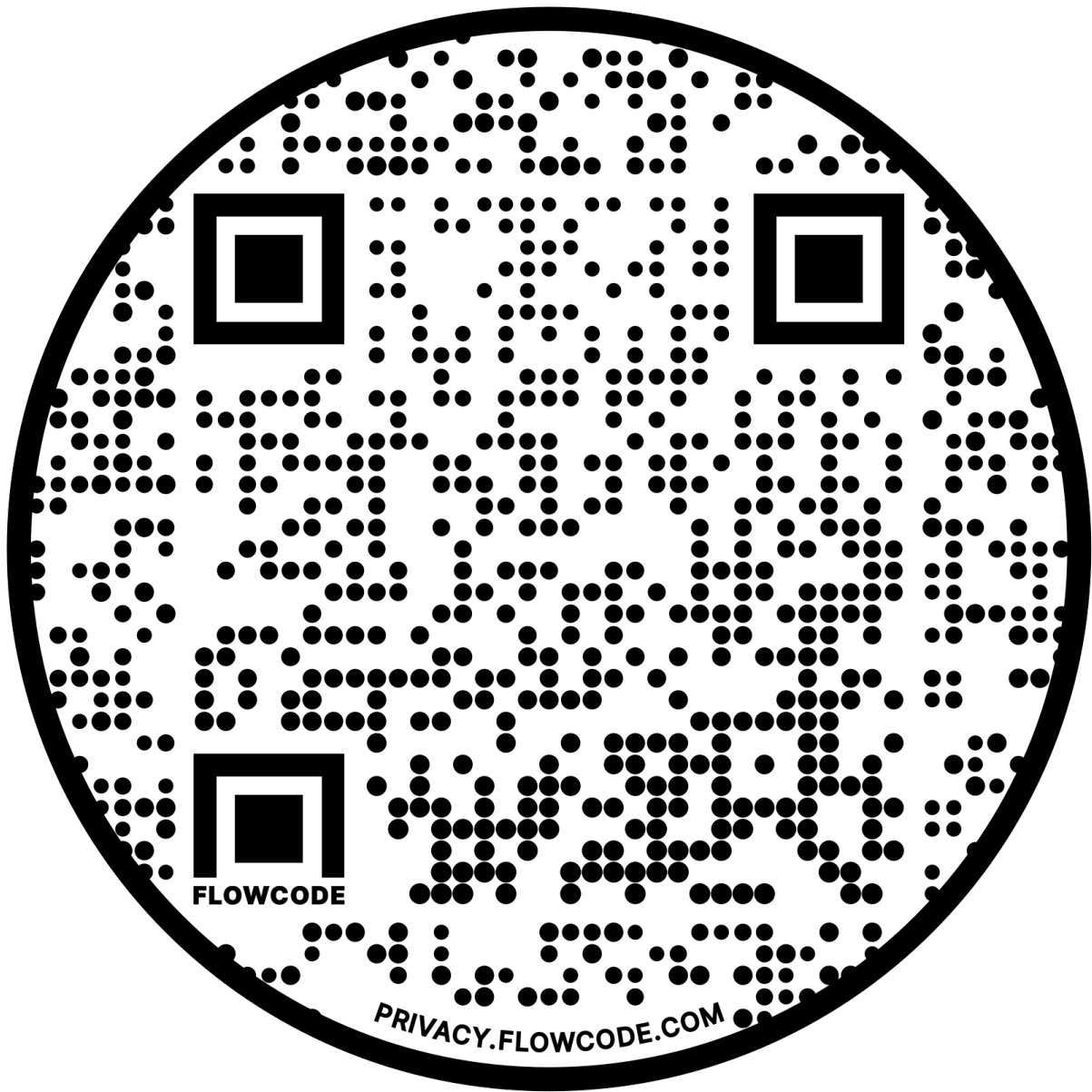
A material exploration of lab-grown leather

Madison Wilds Burger



November 22nd- December 17th

Pratt Institute Photography Gallery
200 Willoughby Ave, Brooklyn, NY 11205



madisonwildsburger.com

speculativesurfaces.com

"In a time where we're considering the vulnerability and fallibility of our own bodies, I am looking to different growth cycles as an inspiring source of resilience"

Speculative Surfaces; a material exploration of lab-grown leather, exhibits work made by Madison Wilds Burger created between 2020 and 2021. Displayed are photographs, material samples and an installation piece demonstrating a life-cycle.

Over the past year and a half, I have been developing lab-grown leather, derived from bacteria and yeast. Throughout this process, I have used photography to document the life-cycle of this material, the different textures it embodies and the expansive qualities obtained from experimentation. While continuing my efforts towards improving the durability of this material, my "failed" attempts have proven to create intriguing images; some of which are displayed. The installation piece in the center of the gallery will display one full growth cycle of the material throughout the duration of the exhibition (1 month). A thin layer of film (demonstrating the material in its raw form) will be viewable during the last week of this exhibit.

Speculative Surfaces is a textile company based in Chicago, IL, currently developing lab-grown leather. This novel material is grown by fermenting infinitely renewable bacteria-nanocellulose (BNC) and grows within weeks. Through the use of new technology, we can replicate qualities most desired in leather and envision a material thicker than any animal collagen possible. We can eliminate the use of animal hides and harsh chemicals like Chromium and replace them with bacteria and yeast; ethical resources. Through the use of vertical farming and regenerative growth cycles, BNC leather is a sustainable alternative to conventional leather.

Our goal is to address the toxicity and inequality within the leather industry by creating a product that can replace these current modes of production.

Prints available for purchase
For price list email- madisonburger@gmail.com



BNC sample 38

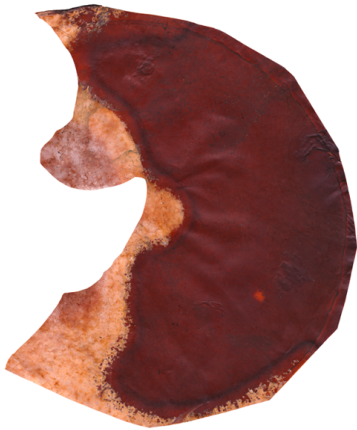
2021

*This piece was made in collaboration with Komunity Kombucha in Chicago, IL



BNC sample 01

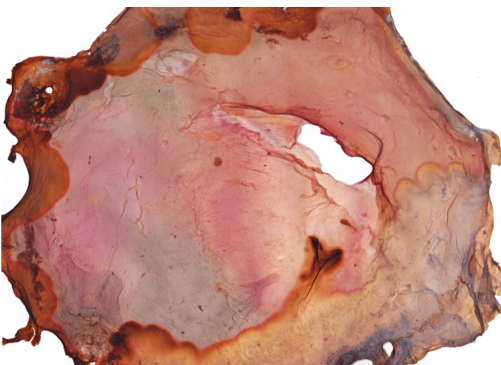
2020



BNC sample 30

2021

*This piece was made in collaboration with
Komunity Kombucha in Chicago, IL.



BNC sample 32

2021



BNC sample 18

2021

*The physical material sample of this scan is on the lightbox in the back of the gallery.



BNC surface manipulation samples 1

2020 & 2021

*Digital heat transfer and embossing.



BNC surface manipulation samples 2

2020 & 2021



BNC sample 23

2021



Harvesting 1/5

2020

*Images 1-5 depict the harvesting of various raw BNC material samples.



Harvesting 2/5

2020



Harvesting 3/5

2020



Harvesting 4/5

2020



Harvesting 5/5

2020

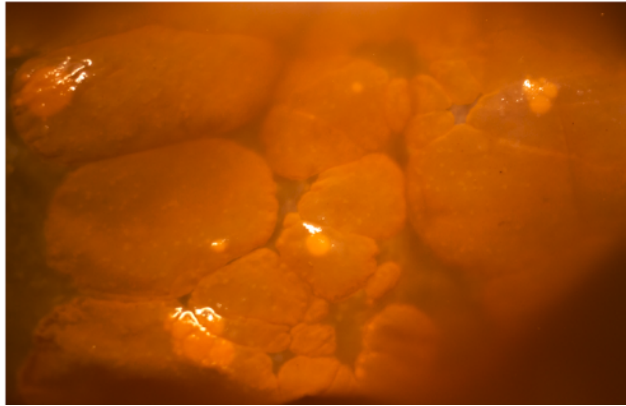


Growth Cycle

2021

*The installation piece in the center of the gallery will display one full growth cycle of the material throughout the duration of the exhibition (1 month).

A thin layer of film (demonstrating the material in its raw form) will be viewable during the last weeks of this exhibit.



BNC sample 18 unharvested

2021

*This image was taken before the material sample below was harvested.

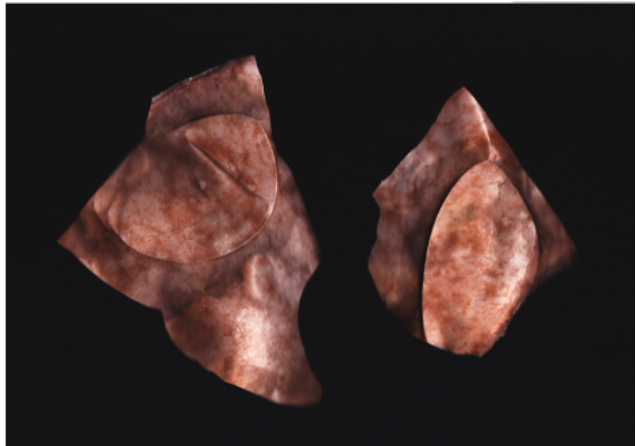
Prompt for the making of this textile:
How can we grow our own patterns?



BNC sample 18

2021

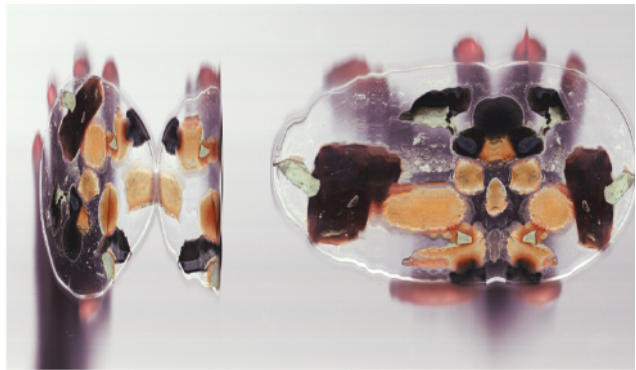
*Prompt for the making of this textile:
 How can we grow our own patterns?



BNC sample 42

2021

*Bio-packaging prototyping.



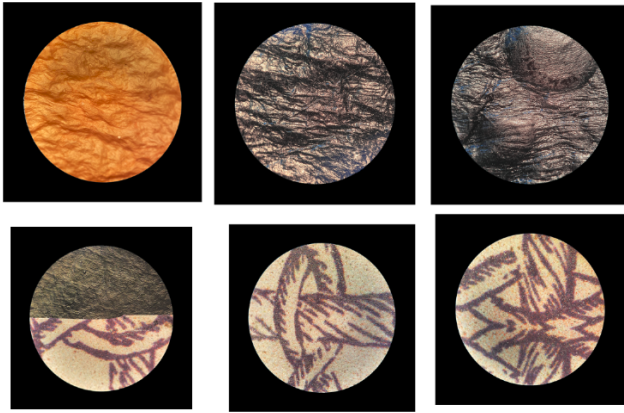
Cluster

2021



Binder Clip

2021



Microscope Series

2021

*These images are taken at 4x magnification. In order top to bottom;

1. BNC sample 01
2. BNC sample 02
3. Trapped bubbles
- 4-6. Digital heat transfer



Draped BNC sample 04

2020



Mini Chair Prototype

2021

*This piece was made in collaboration with Austin Rea Frisby, furniture designer.