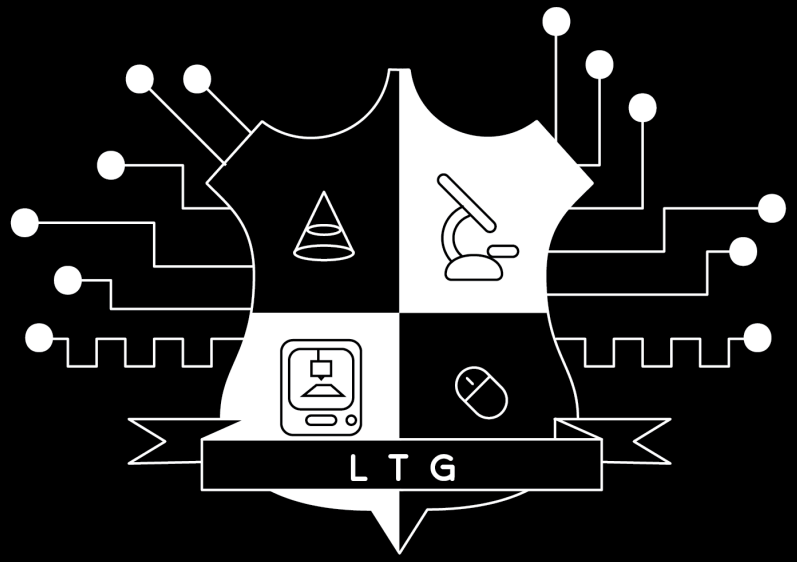


WORKING WITH MYCELIUM

BY

Annelie Koller

MYCELIUM

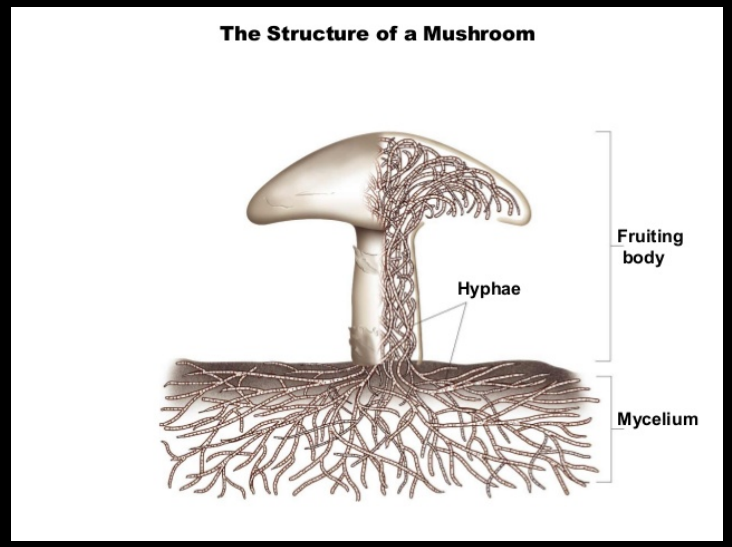
Phil Ross

MYCELIUM

Mycelium is the vegetative part of fungi, it consists of a mass of hyphae made up of long thread like strands that branch off of one another, forming a tightly woven mesh in the substrate in which it grows.

Currently mycelium is being used in the art and design world for various applications. The strong fibers of mycelium works wells as a natural alternative to wood, cork and plastics and can also be easily shaped into both structural materials such as insulation and decorative artifacts such as lampshades and homeware. It is also produced in a more energy efficient way than conventional manufacturing.

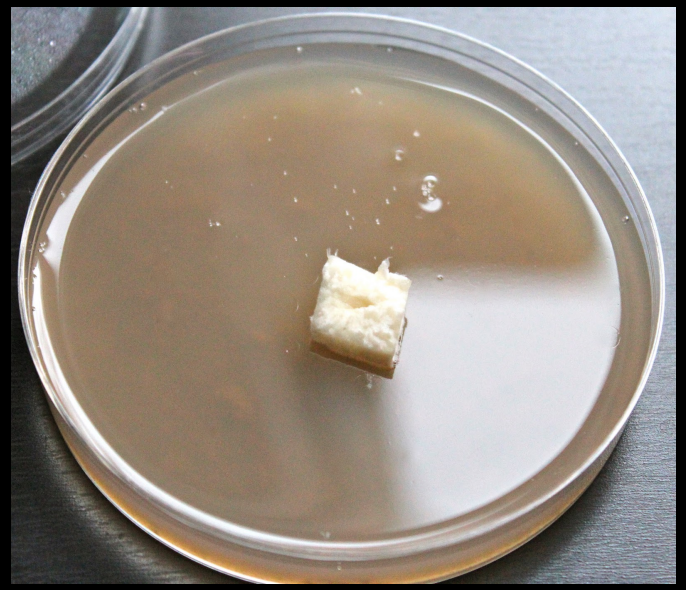
The use of mycelium as an alternative building material is revolutionary and is proving that there are natural alternatives to our current ways of manufacturing.

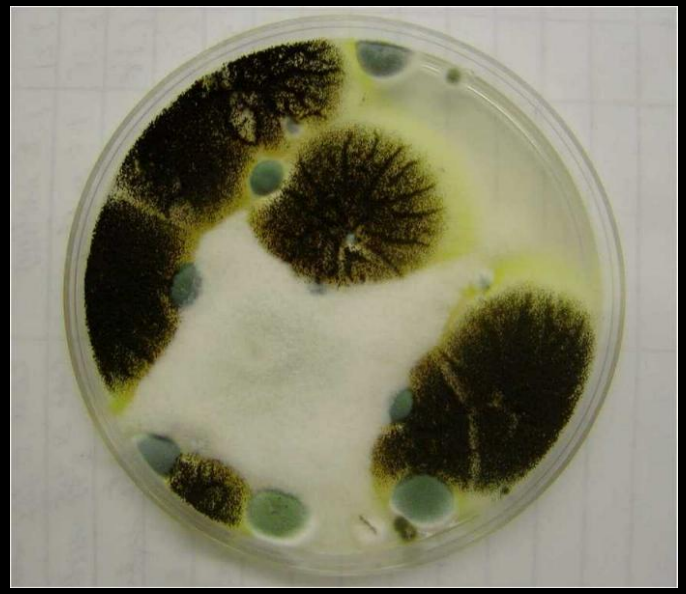


Phil Ross

Step 1: Create Mycelium Culture

1. Malt or Potato Agar
2. Petri Dish
3. Isopropyl Alcohol
4. Gloves
5. Mycelium sample



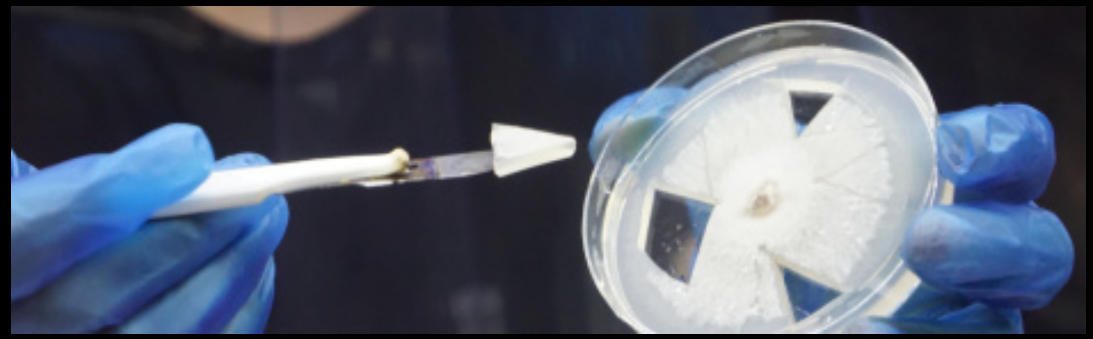


Step 2: Create Mycelium Substrate:

1. Distilled water
2. Birdseed
3. Wood based cat litter
4. Prepared Glass container
5. Mycelium culture*

Step 3: Inoculate substrate:

Use mycelium culture (either store bought or self-made)



Step 4: Mycelium growth

Keep in warm, dark place for as long as it takes for your substrate to be fully grown.
Grow it into any shape!!.

Step 5: Designing and growing your 3D object

From here you can use this same method and grow the mycelium in various shapes and sizes. It takes on the shape of the clean container that you grow it in, so can be grown to become anything you can imagine.

Danielle Trofe

The Living

Step 5: Beware of contamination

Keep in warm, dark place for as long as it takes for your substrate to be fully grown.

THINGS TO REMEMBER

1. When working with biological material, always keep it very sanitary. Clean your equipment with alcohol, hot water or iodine. Soap and detergents might kill your specimen. Dirt will leave with you contaminated, smelly and unsuccessful projects
2. Biology takes time, so be patient. The longer you wait, the greater the reward. But you do need to take care of the specimen along the way. Keep it clean, keep the temperature and light for optimum growing conditions and keep an eye on it.
3. If things do get contaminated, bleach kills just about anything and you should discard your specimen in bleach