Engage4BIO

Pure Hyphae

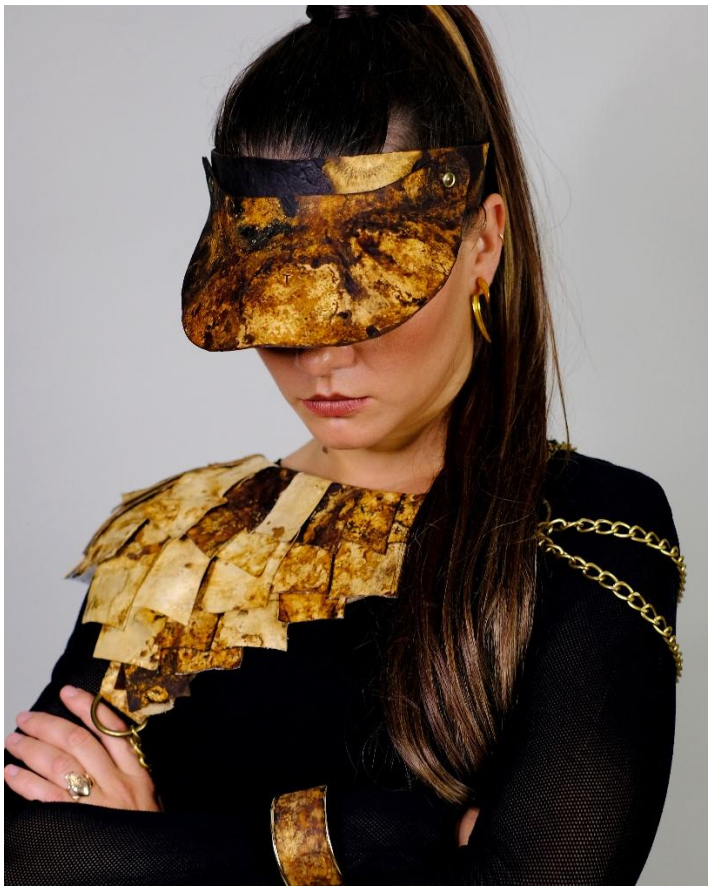
The Project

Reimagining fashion with mycelium-grown textiles

- Explores mycelium (fungal root structures) as a leather alternative
- Cultivates 3D forms directly during growth, reducing waste and processing
- Emphasizes mycelium's natural textures rather than imitating leather
- Uses low-energy, chemical-free production methods
- Fully biodegradable, based on natural fibers only
- Demonstrates applications through fashion accessories:
    - 3 hats, harness, belt, necklace, and bangles
- Combines two fabrication techniques:
    - Grown as skins to cut and assemble
    - Grown directly onto 3D felted structures
- Developed in a design studio–lab hybrid, enabling real-time iteration
- Promotes decentralized, open-source biofabrication
- Bridges art, science, and sustainability to democratize biomaterial design
- Aims to decarbonize and decentralize material production in fashion

Designers – Jessica Dias & Annah-Ololade Sangosanya

- Jessica Dias: biomaterial researcher, designer, and architect
    - Integrates living organisms into design and wearable technologies
    - Focus on accessible bio-design and public engagement
- Annah-Ololade Sangosanya: bioengineer and biodesigner
    - Specializes in microorganism-based materials for fashion and recycling
- Co-founders of MycoCell, a biodesign lab in Barcelona
- Lead projects like Pure Hyphae and the mycelium surfboard ONGO
- Champions of myco-materials, ecological design, and distributed innovation.



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> “Multi-stakeholder engagement to strengthen regional bioeconomy value-chains”

Consortium :

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