GREENING THE LAB: DECARBONISING BIOMEDICAL SCIENCE

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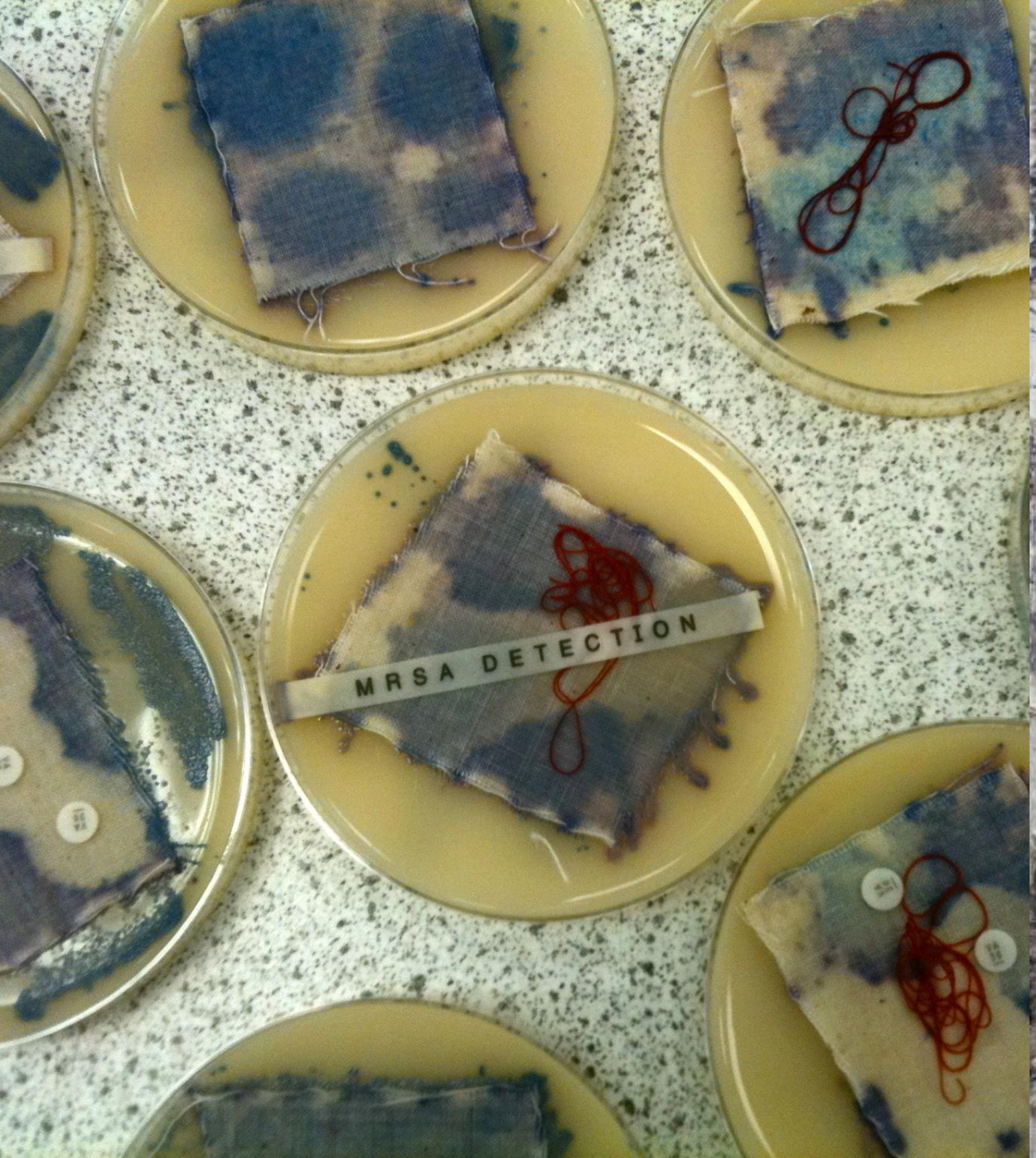

MRSA DETECTION


FUTURES

WHAT IS THE VOICE PROJECT?

- Encourages Citizen Engagement Using Artist-Led Innovation
- VOICE uses a new approach where artists bring together different groups to solve environmental problems in their area. They work together to create green solutions, making the ecosystem stronger and more resilient.
- https://www.voice-community.eu/

GREENING THE LAB: DECARBONISING BIOMEDICAL SCIENCE #1

- The “Greening the Lab” artistic intervention has responded to an urgent need from the biomedical research community to create novel solutions to drive forward the decarbonisation of biomedical science and healthcare and raise awareness of sustainability
- Health is significantly affected by climate change, but healthcare is also a large contributor, responsible for almost 5% of global greenhouse gas emissions
- 240000 tons of medical waste produced each year with 96% of it coming from hospital settings

GREENING THE LAB: DECARBONISING BIOMEDICAL SCIENCE #2

- Working with biomedical science and patient and public engagement communities, through workshops, ensures that diverse perspectives are considered in the development of sustainable practices.
- By repurposing single-use plastic items and other materials commonly discarded in biomedical research, the project reduces waste sent to landfills and promotes recycling within the scientific community.
- Future exhibitions of the resulting artworks will inspire audience to consider sustainability in biomedical science.

COMMUNITIES

- Brighton and Sussex Medical School (BSMS)/ University Hospitals Sussex NHS Foundation Trust
- Leeds University Healthcare Associated Infection Research Group
- Modernising Medical Microbiology (MMM) at the University of Oxford

METHODOLOGY

- I used a participatory art process that enables and facilitates discussion in a non-hierarchical way through hands-on making and discussion.
- We explored current practices and let our minds wander to highly speculative futures while making and chatting
- We focussed on things like the materiality of the biomedical waste, the aesthetic sensations that it creates in us from disgust at a used Petri dish (even sterilised bacteria can have a powerful stench) to the beautiful colours of agar and bacteria and explore the scientific issues around contamination and risk.

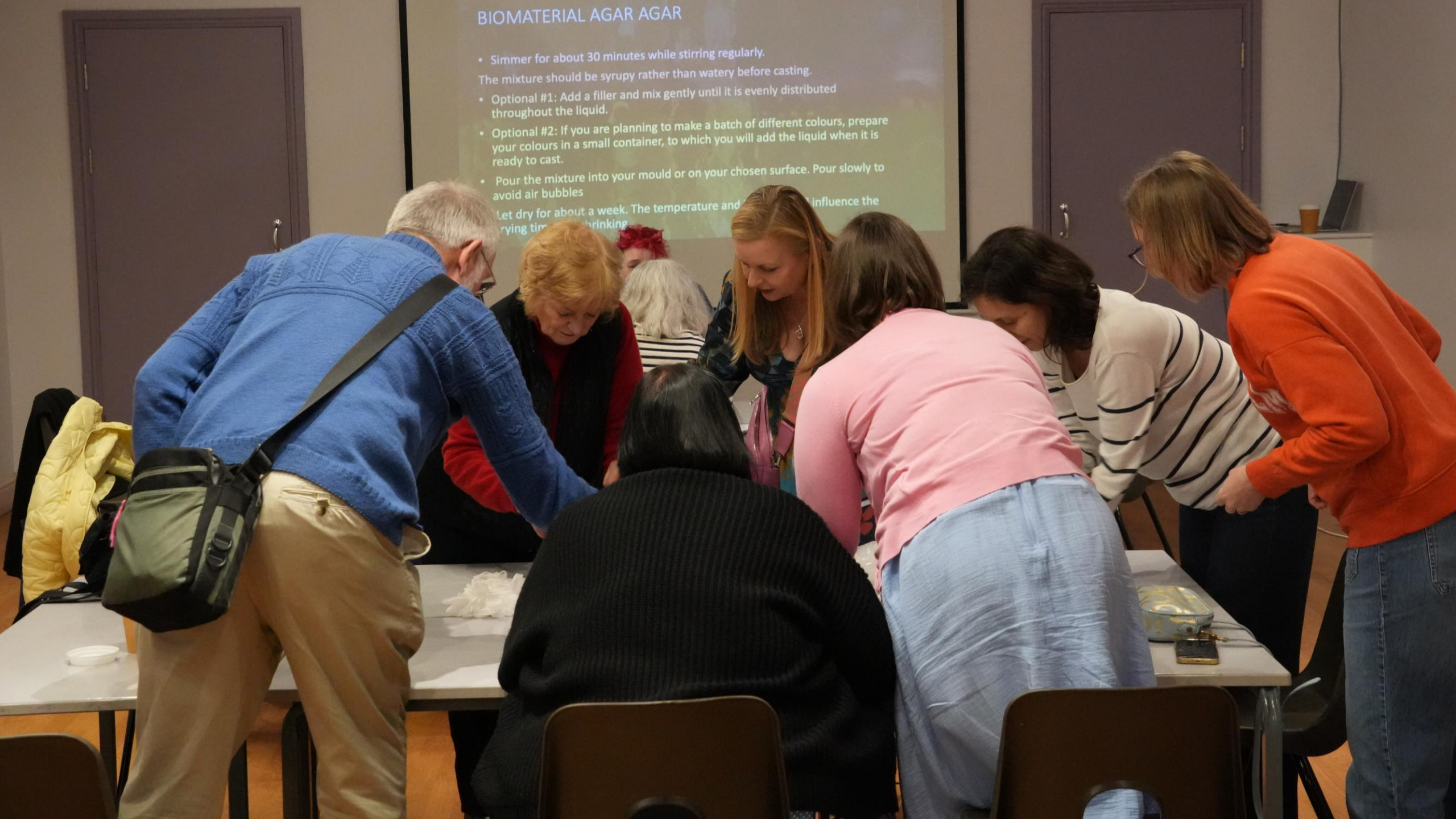
WORKSHOPS

- I have run a series of six participatory art workshops across Leeds, Oxford and Brighton where we have discussed the issues involved in a broad way and considering the materiality of what we are dealing with
- We worked together in hands-on ways to co-create solutions
- Examples of questions we have explored include: can agar that has been used to grow bacteria in the lab be used in the production of biocomposites? Can the wool used to protect glassware be used to make felted objects or clothes? Can a metal laryngoscope blade be made sterile using alternative methods?


Inspect/Replace 2019




door
keep shut


BIOMATERIAL AGAR AGAR
Simmer for about 30 minutes while stirring regularly.
The mixture should be syrupy rather than watery before casting.
Optional #1: Add a filler and mix gently until it is evenly distributed throughout the liquid.
Optional #2: If you are planning to make a batch of different colours, prepare your colours in a small container, to which you will add the liquid when it is ready to cast.
Pour the mixture into your mould or on your chosen surface. Pour slowly to avoid air bubbles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LINKS

- https://www.annadumitriu.co.uk
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