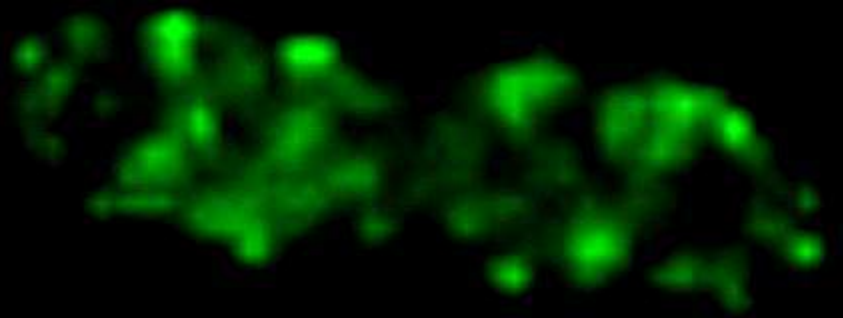
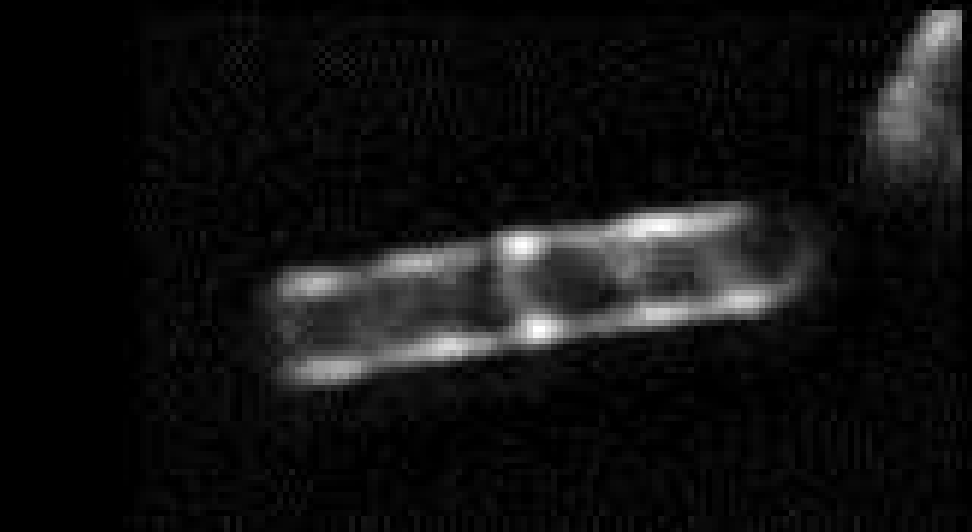


“ Illuminating Bugs in Glass –
A Fusion of Science with Art”



Derek Hill Artist in Residence

Developing an Artist in Residence programme here in collaboration with the CBCB

Who am I

- I am primarily a painter/printmaker, I have an independent practice and live in Newcastle
- I have also spent a lot of my time developing my work in collaboration with others within the public arena

A little bit about me

- Graduate of the Royal College of Art
- I have had fellowships and Residencies at Bishop Grosse teste University, Lincoln; the Artescape Trust, Lincoln; and for the Council of Bedfordshire.
- I have held posts of visiting lecturer at: Falmouth School of Art; the School of Art & Design, Kingston upon Thames University; the School of Art & Design, Coventry; the College of Art, Staffordshire University, Stoke on Trent; and The Lincoln School of Art & Design, Lincoln University.
- I have given seminars of my working practice in Barcelona and San Sebastian.
- My paintings and printmaking are featured in several private and public collections, including the Imperial War Museum and the North of England Museum Service, Newcastle
- National recognition Award from The Daily Telegraph/Association of Business Sponsors of the Arts

Public Engagement Example 1.

In 1986 I founded The Art Studio, Sunderland. I was its artistic lead until 2012 developing my work alongside others, providing free space, equipment and materials, encouraging more than 30 people onto BA Hons and MA degrees. Promoting the work of the Studio through exhibitions and symposiums nationally and internationally.
The Studio achieved national recognition pioneering the practice of Art in the field of Mental Health.

Public Engagement Example 2

“book” was constructed in collaboration with Nissan UK and commissioned for Visual Arts UK by the Arts Council of England and the City of Sunderland. It measures 10mtr when open

What am I doing here? Why is it important to CBCB?

- Fusing science with art by working together to establish an Artist in Residency programme here at the CBCB with funding from the Wellcome Trust

- To develop a new body of artwork that is significant to me and illustrates what CBCB does and to stimulate awareness, intrigue, perceptions and debate among a wider audience

- To actively engage with the public at all levels, including children and schools, through a programme of displays/workshops by applying methods used in art and science, culminating in a high profile exhibition at the Centre for Life

www.derekhill.co.uk

Why was I interested in the CBCB in the first place?

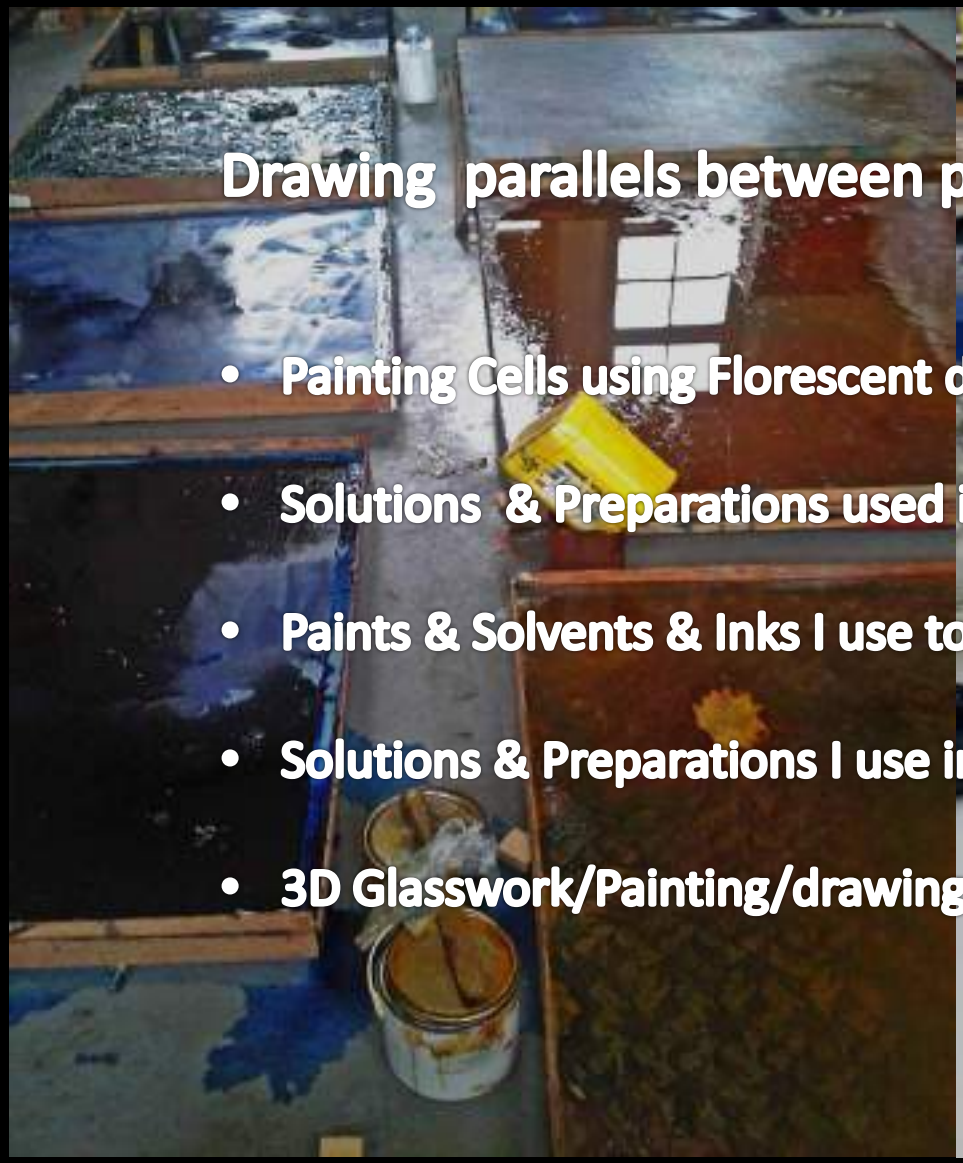
My artwork is influenced a great deal by events and circumstances that occur in my life

Africa experience

- On my return from a tour of the Comoro Islands, off the East Coast of Africa in 1990, I was admitted to the Infectious Diseases Unit at Newcastle General Hospital where I was diagnosed as having a; streptococcus septicaemia, type A, bacteria. Due to the nature of the illness I was declared a case study and a major cause for concern. The infection was rare and one which almost claimed my life.
- I survived without discovering the true origin and culture of the bacteria.
- I thought that the only testament to this epic moment in my life were three very large scars on my left arm, until I recently acquired my hospital records.
- However, on reflection, the experience has been a key source for my artistic endeavour ever since and is the reason why I'm here to tell my story within a much bigger picture alongside the best in micro science

A Fusion of Art & Science

Work in Progress



Drawing parallels between processes we use in our practice

- **Painting Cells using Florescent dyes & Inks in Microscopy**
- **Solutions & Preparations used in the Labs**
- **Paints & Solvents & Inks I use to paint with**
- **Solutions & Preparations I use in my studio**
- **3D Glasswork/Painting/drawing/scientific data……and more…..**

Examples of my painting

This painting has a 3D appearance but has a completely “flat” surface. This painting measures 2.80 x 3.60 metres

Some of the paintings have a completely “flat” surface and give the appearance of being 3D. These measure 1.80 x 1.80 metres

Painting measures 2.80 x 3.60 metres

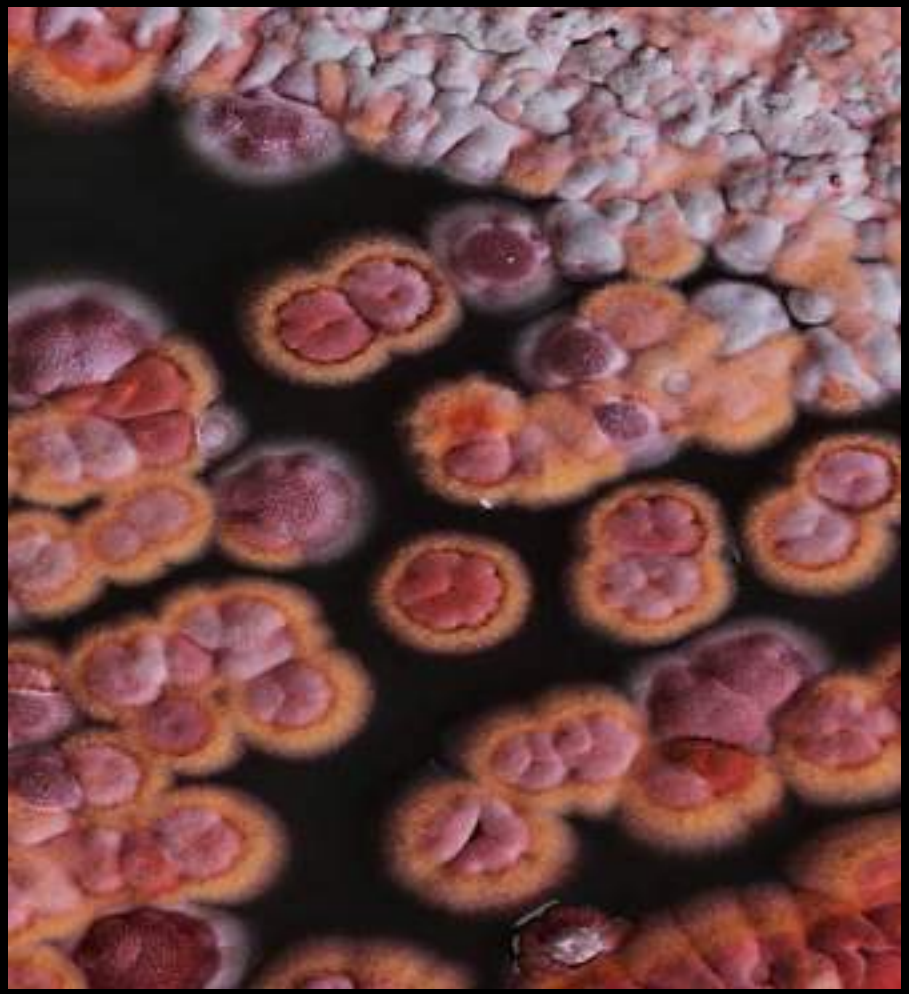
‘ Caveat Emptor’ Painting measures 1.80 x 1.80 metres

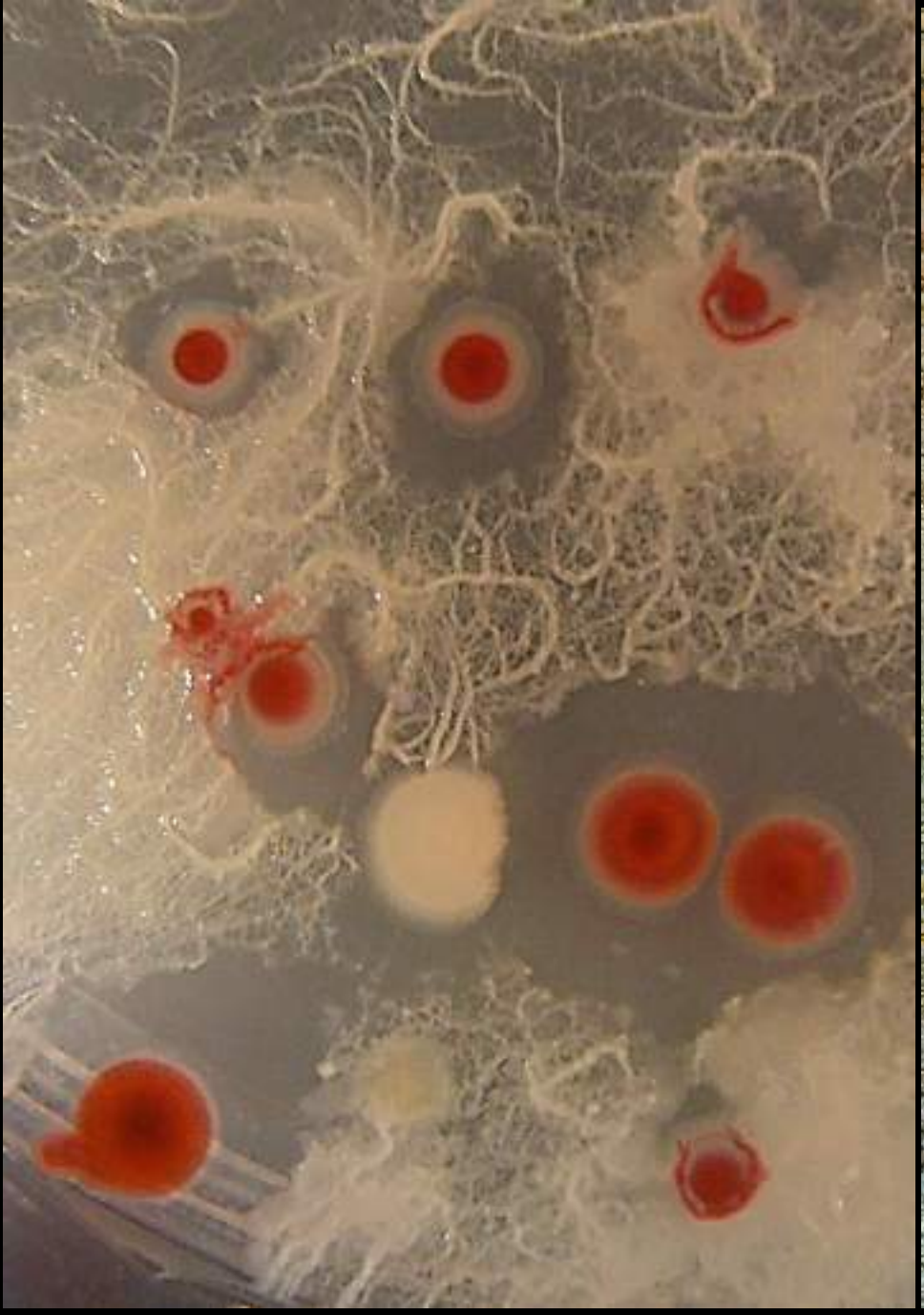
A fusion of artist and scientist

Dual personality or growth and division

A Fusion of Art & Science

Preparation of plate sampling and experimenting with solutions chemicals and various levels of consistencies





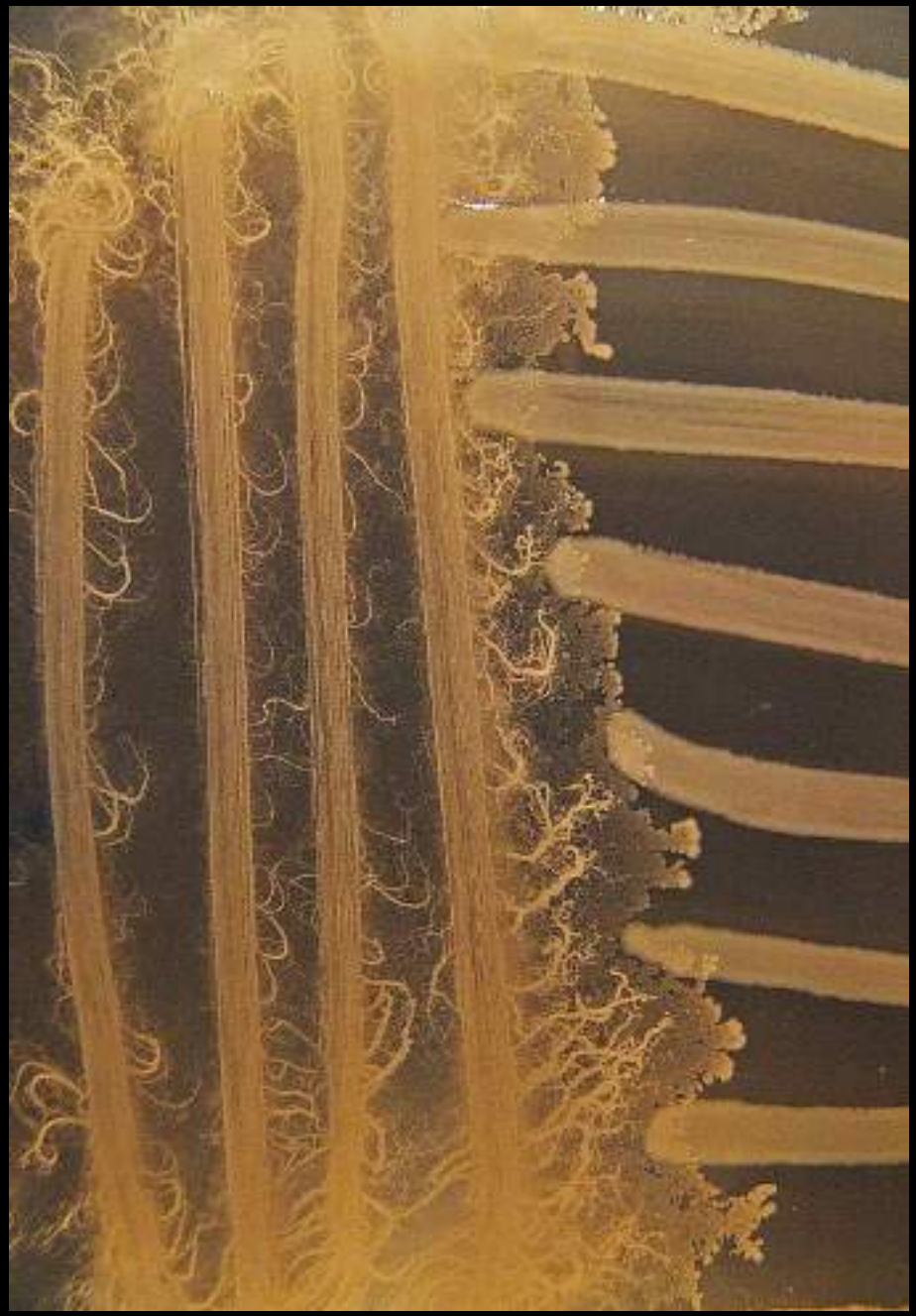
4 x 2 cm

2.80 x 3.60 metres

Contrasting styles: Colonies and communities exist side by side. Scale and time are no different in value to our process. Photo of a plate sample (2 x 4 cm approx.) painting (3.6 x 2.8 metres)

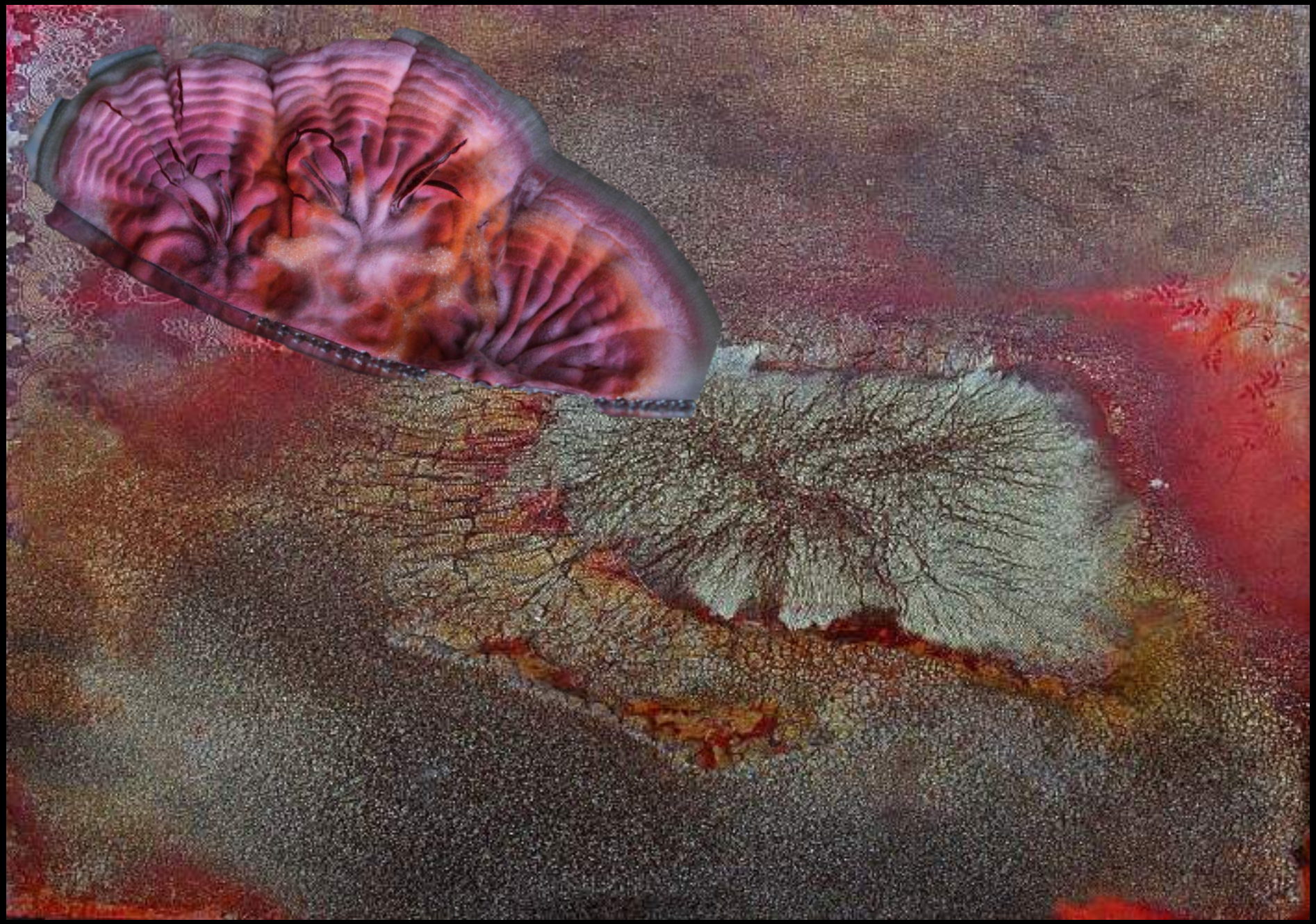
2 x 4 cm

1.80 x 1.20 metres



2 x 4 cm

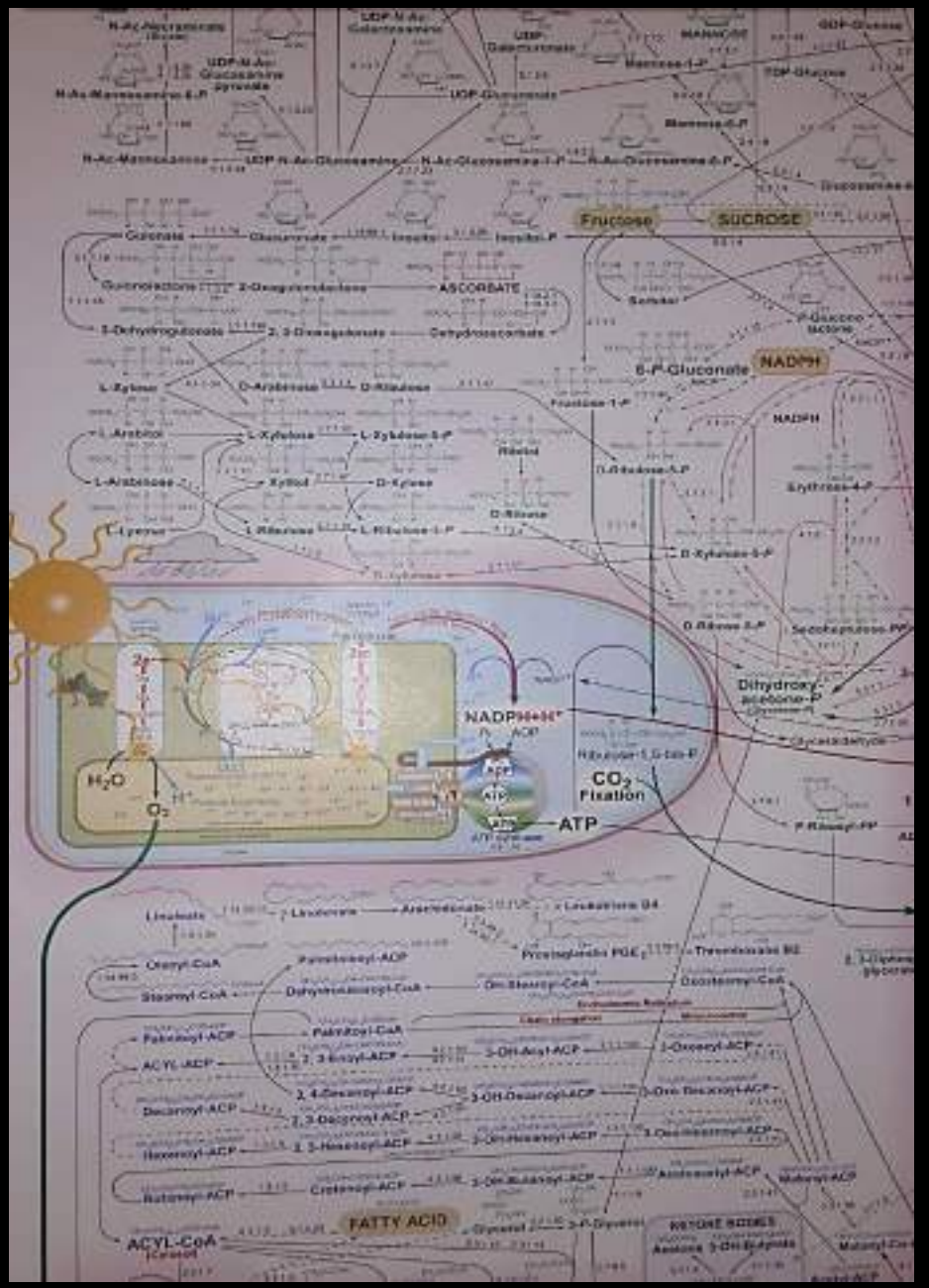
1.80 x 1.20 metres



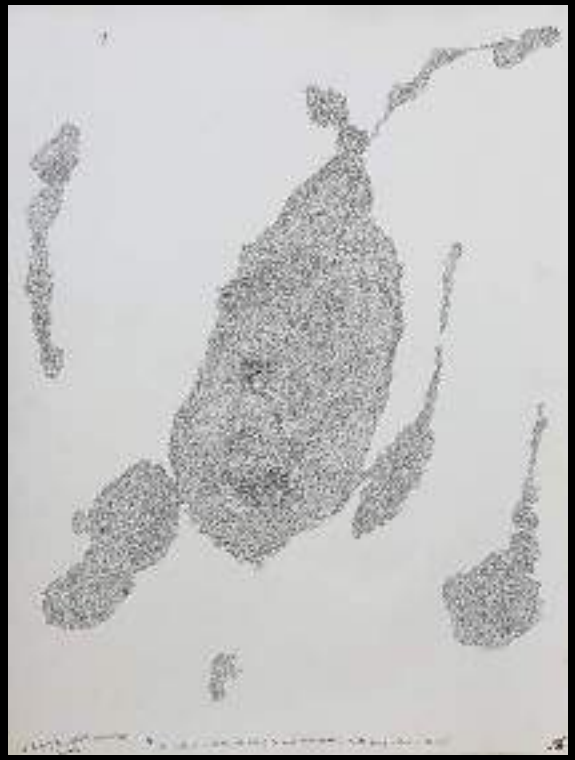
Streptomyces sp. (Kaveh) from the “Flaw” series

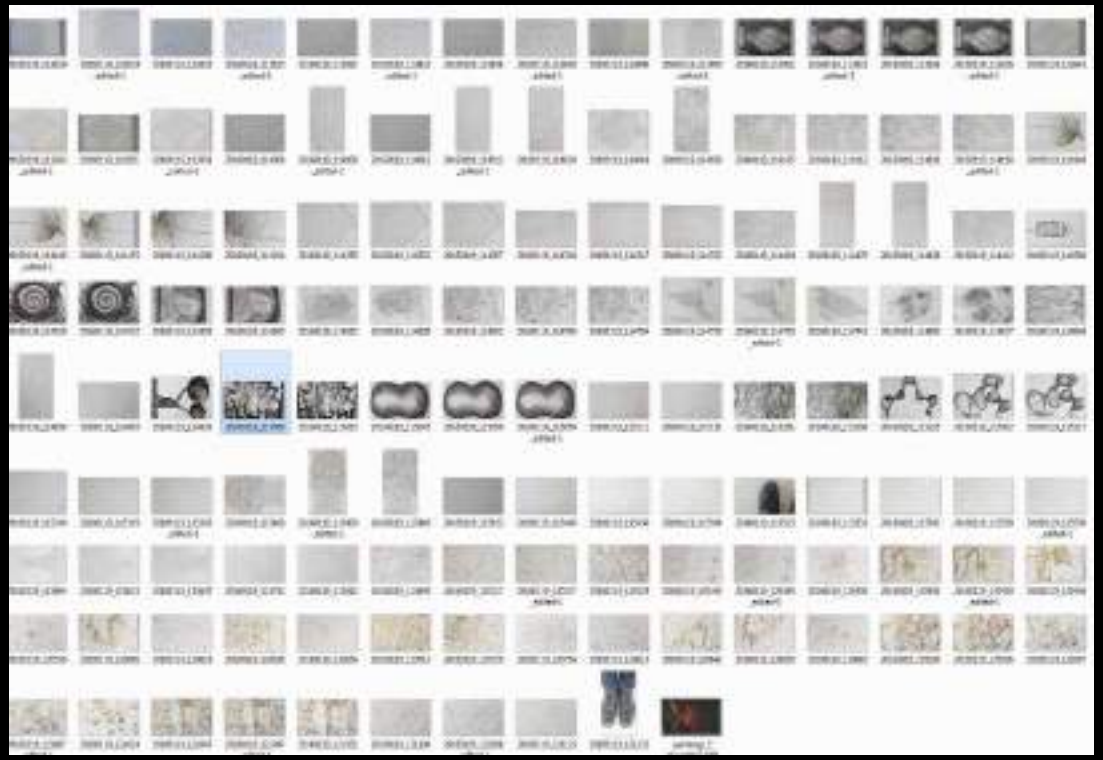
“Metabolic Pathway Chart”

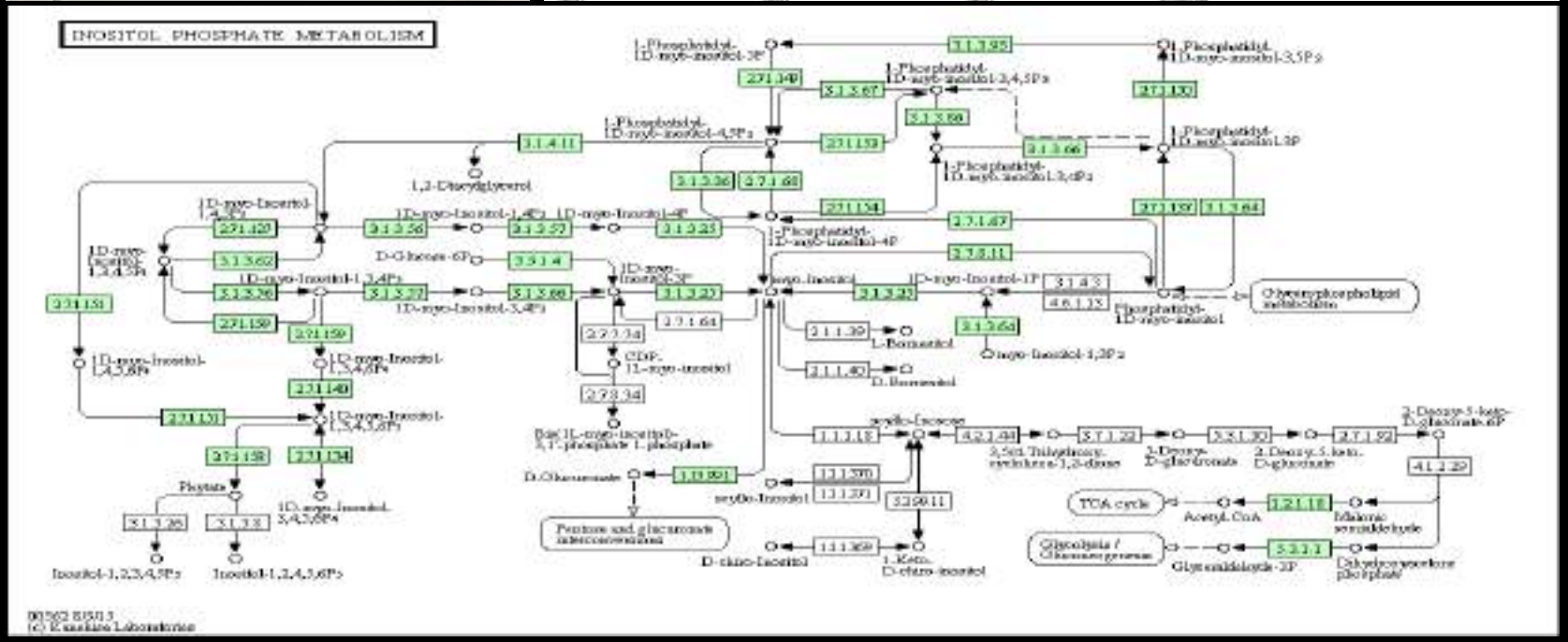
drawing of “the Machine”

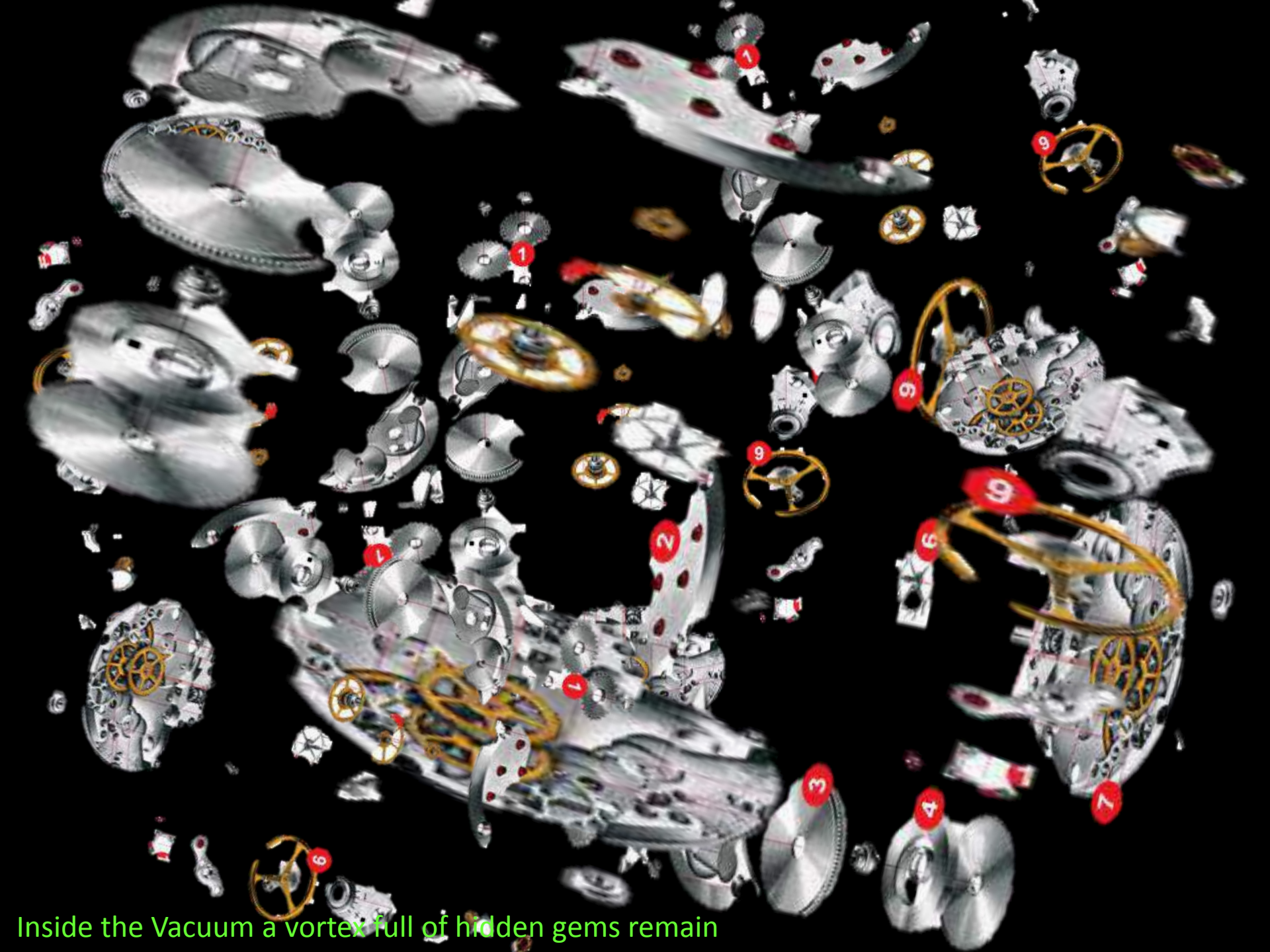


Example 2








Inside the Vacuum a vortex full of hidden gems remain

- New slide with a soundtrack recording from outside St. James park football stadium on match day. The nullifying noise is reminiscent of a pre-natal ultra sound test
- Lights will be turned off to accommodate the screening of time – lapse animation sequences with soundtrack accompaniment
- This can also double as part of the installation at the CFL of animated time – lapse sequences

Quote from the Wellcome Trust website 2015 re: merging science with art for Public Engagement

"We believe that artists have a distinct approach to understanding and communicating ideas that can illuminate and challenge perceptions within society. We are convinced therefore that the arts have an invaluable role to play in engaging the public with biomedical science."

The Wellcome Trust Arts Award will help us to:

- **Produce an installation artwork for at the Centre for Life: including a Centrepiece Glass & Metal sculpture; a series of Time-Lapse movie sequences; Drawings; Science data and Live Plate samples**

- **Public Engagement will include: On-going displays of artwork alongside the workshops at the Centre for Life.**

- **Promote the Project locally, nationally and internationally through an interactive website; Links to social media, Local TV/radio, and in the press**

Public Engagement

Installation Glass Centrepiece

Time-lapse movie sequences

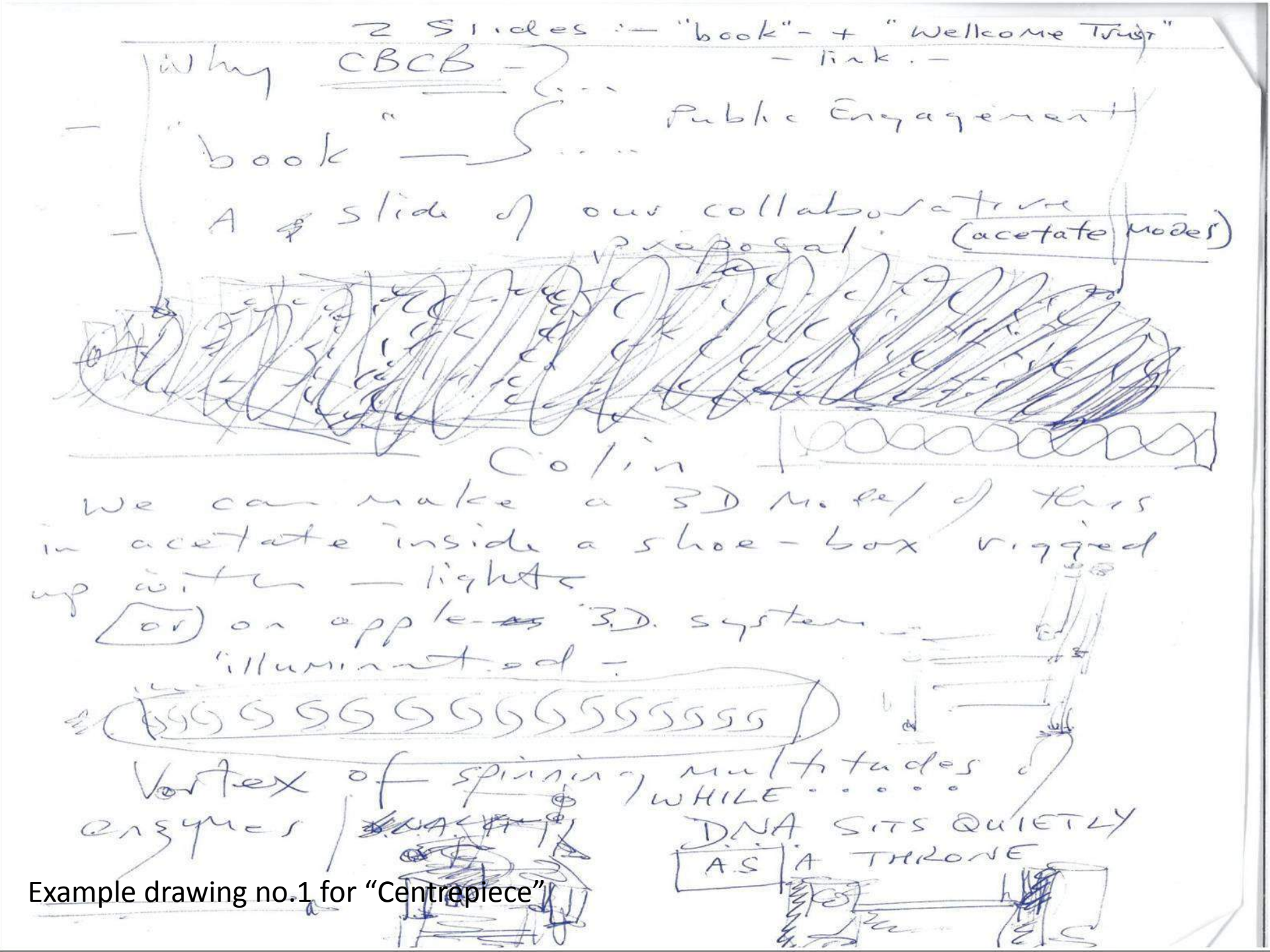
Original drawings/watercolours

Plate samples growing from scratch (under glass display units)

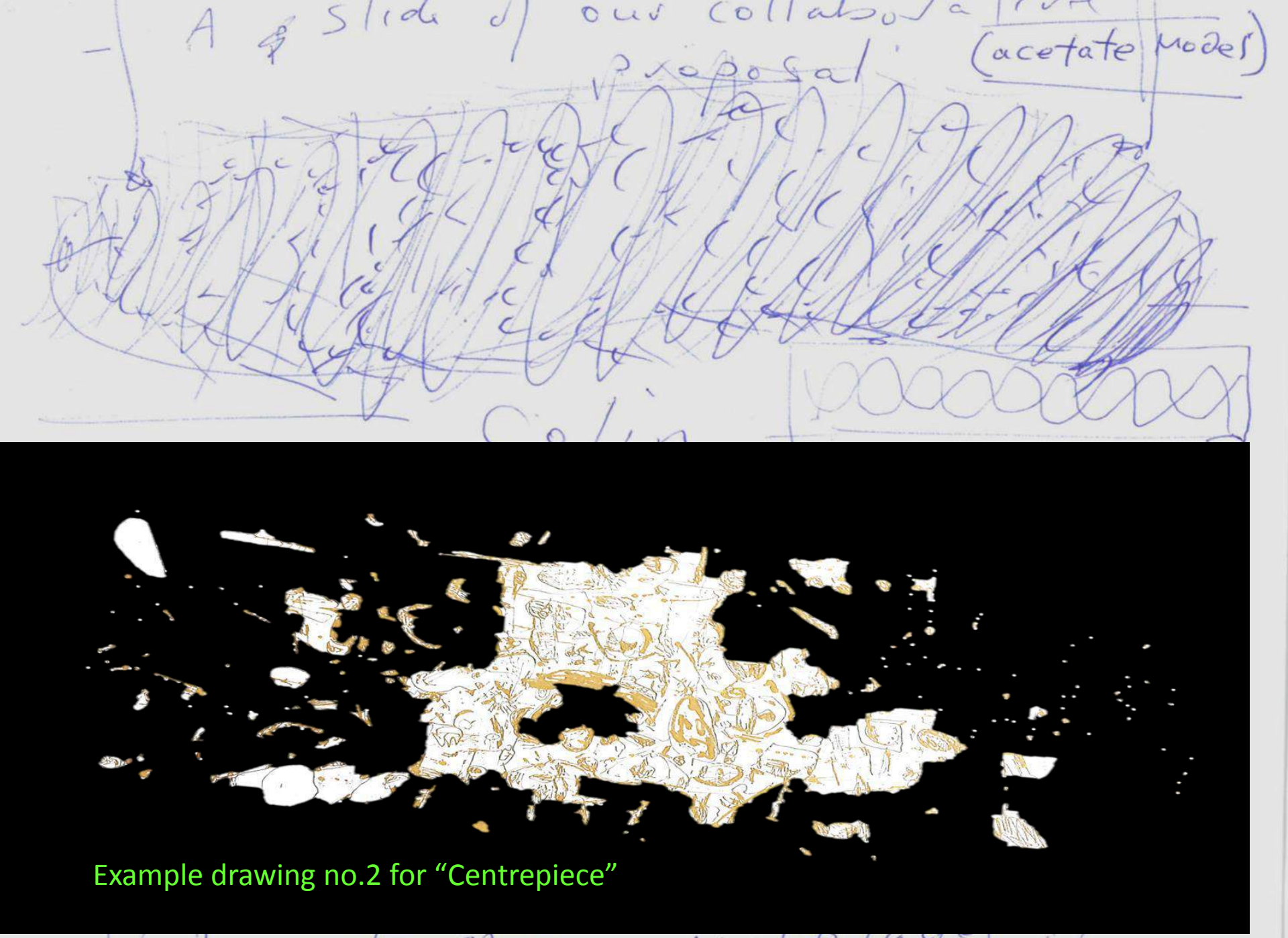
Original Science data

Workshops for younger people which would include a range of media including technology related to the exhibition and integrity of the project

Demonstrating our commitment to engaging with a wide audience
Website, social media local TV and Radio, Press



Example drawing no.1 for “Centrepiece”



Example drawing no.2 for “Centrepiece”

Summary

We would welcome ideas and participation from everyone who is interested at any point in the development of the project.

Collaboration is key to the Wellcome Trust
Interaction between myself and everyone at CBCB is seen as Public Engagement

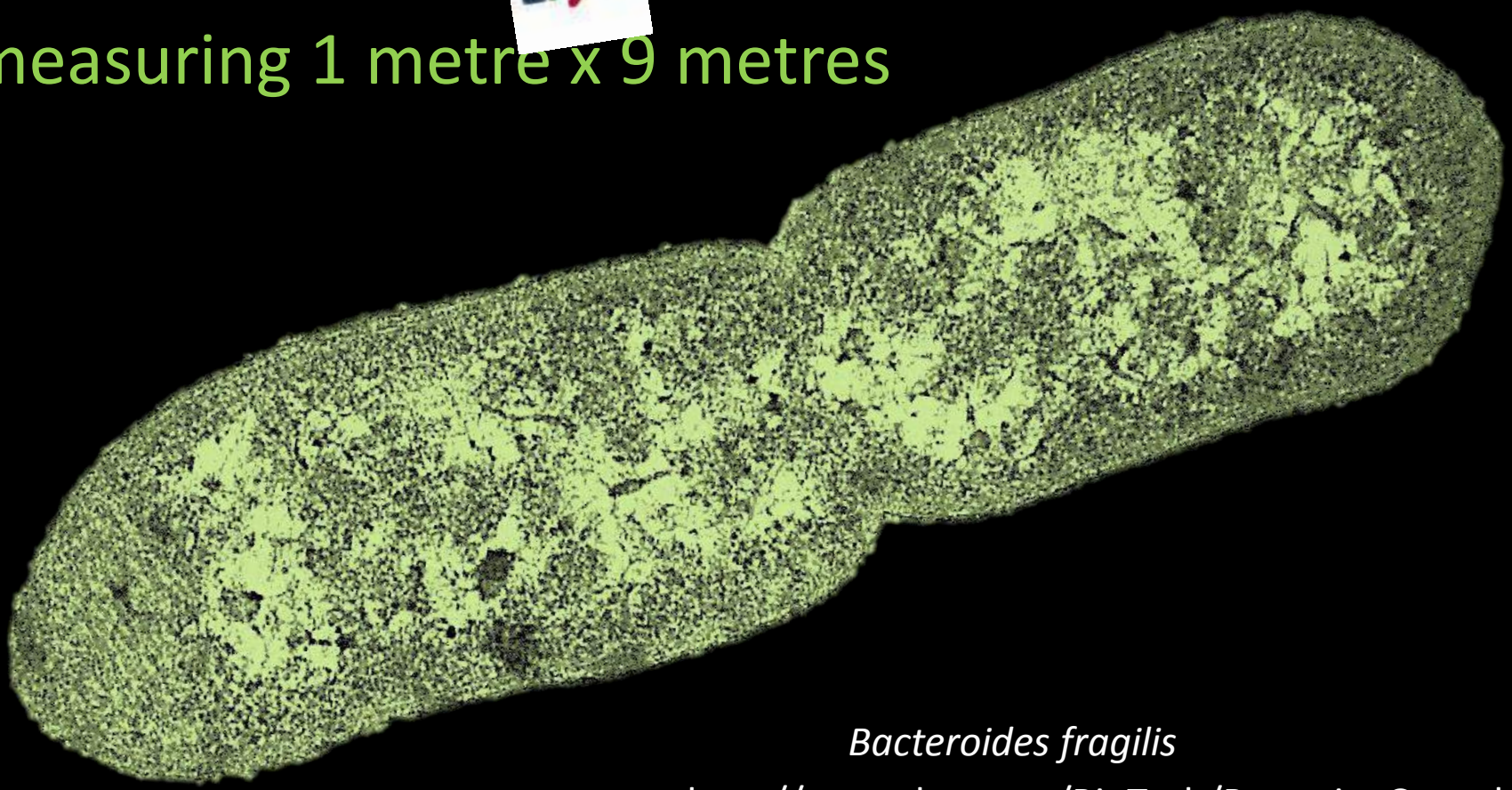
Learning practicing new skills

Please visit my website: derekhill.co.uk and you are welcome to email myself,

derekhill1955@gmail.com or contact Colin or Richard your ideas and comments or if you are interested in participating at any point

“Illuminating Bugs in Glass”

An illuminated Glass & Metal Installation Centrepiece entitled “ the machine”, for exhibiting at the Centre for Life measuring 1 metre x 9 metres



Bacteroides fragilis

http://cronodon.com/BioTech/Bacteria_Growth.html

Any Questions ?