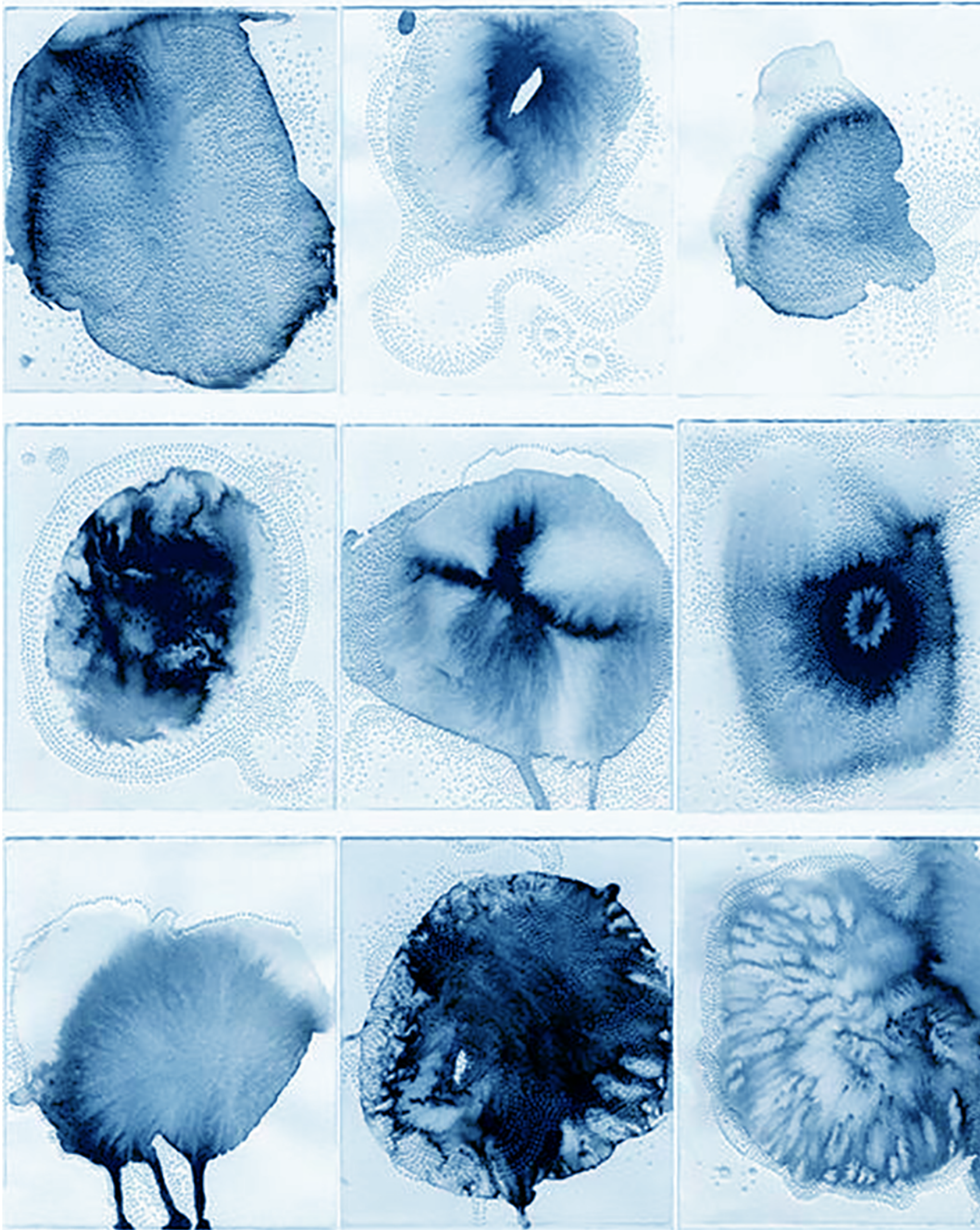


ENCODED POETICS

Citizen science / Final

“ In the future a new generation of artist will be writing genomes the way Blake and Byron wrote verses”

Freeman Dyson



CRISPR - Cas encoding

DNA is an excellent medium

for archiving data

Harvard scientists pioneer storage of video inside DNA

Transfer of Eadweard Muybridge's galloping horse opens possibility of using living cells to store information

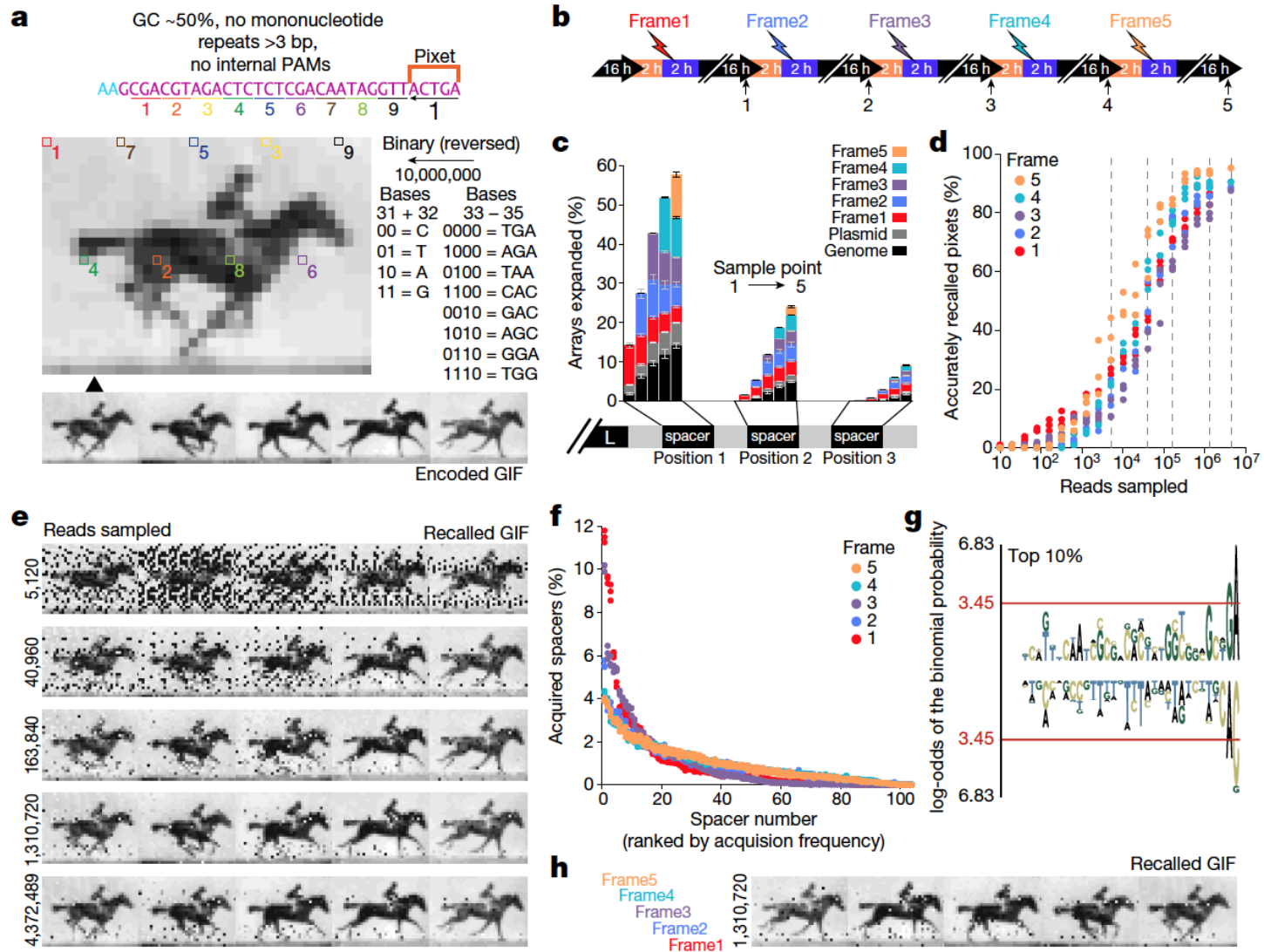


Original Image

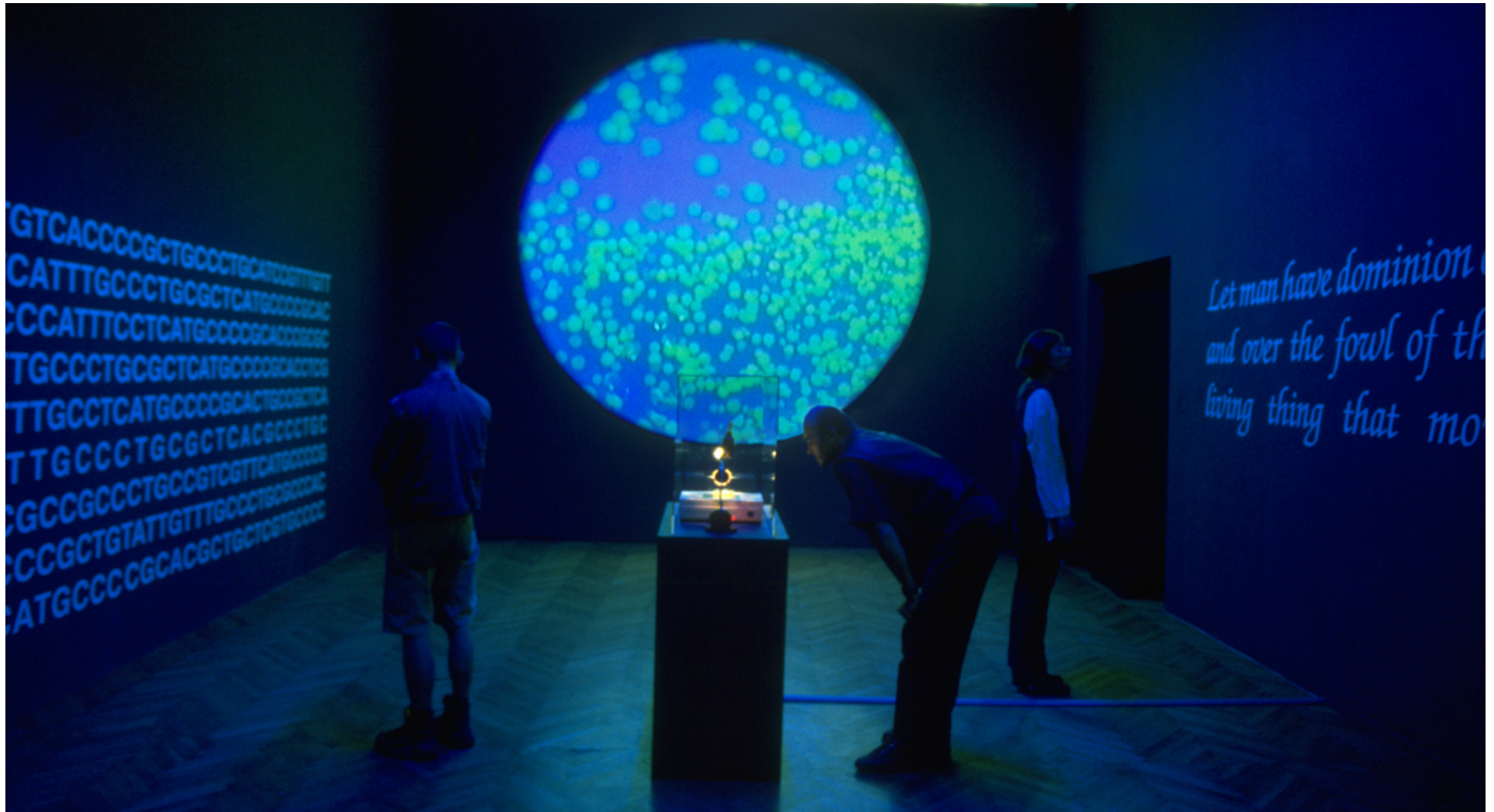
Image Reconstructed From Bacteria

▲ The animation on the left comes from a series of images taken by Eadweard Muybridge of the mare, Annie G, galloping. The frames were encoded in genetic material and stored in living bacteria. The animation on the right shows the frames after multiple generations of bacterial growth, recovered by sequencing the bacterial genomes. Photograph: Seth Shipman

[The Guardian](#)



NATURE - 'CRISPR-Cas encoding of a digital movie into the genomes of a population of living bacteria'

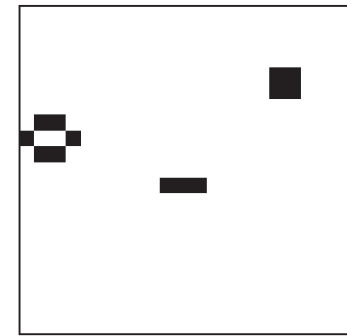


Eduardo Kac - GENESIS

a treasury
it amasses
via twists
knit among
runic gaps
almost all
regalia to
ornament a
thought as
lacing can
mimic gold
cast alloy
set aglint
at auroras
a tapestry

a tapestry
it affirms
via tropes
that atoms
along clad
string can
encrypt an
alphabet a
formula to
uplift all
adept airs
long cries
set adrift
at abysses
a threnody

a threnody
it arouses
via tempos
odic grief
using calm
lament and
erotica to
disquiet a
pageant as
utmost awe
might avow
epic glory
set alight
at arcadia
a treasury



(After 133 generations.)

"I received confirmation from the laboratory at the University of Calgary that my poetic cipher, gene X-P13, has in fact caused *E. coli* to fluoresce red in our test-runs—meaning that, when implanted in the genome of this bacterium, my poem (which begins "any style of life/ is prim...") does in fact cause the bacterium to write, in response, its own poem (which begins "the faery is rosy/ of glow...").

Christian Bok - The Xenotext

Living organisms that capture, store and propagate information over time





Seung Hwan Oh



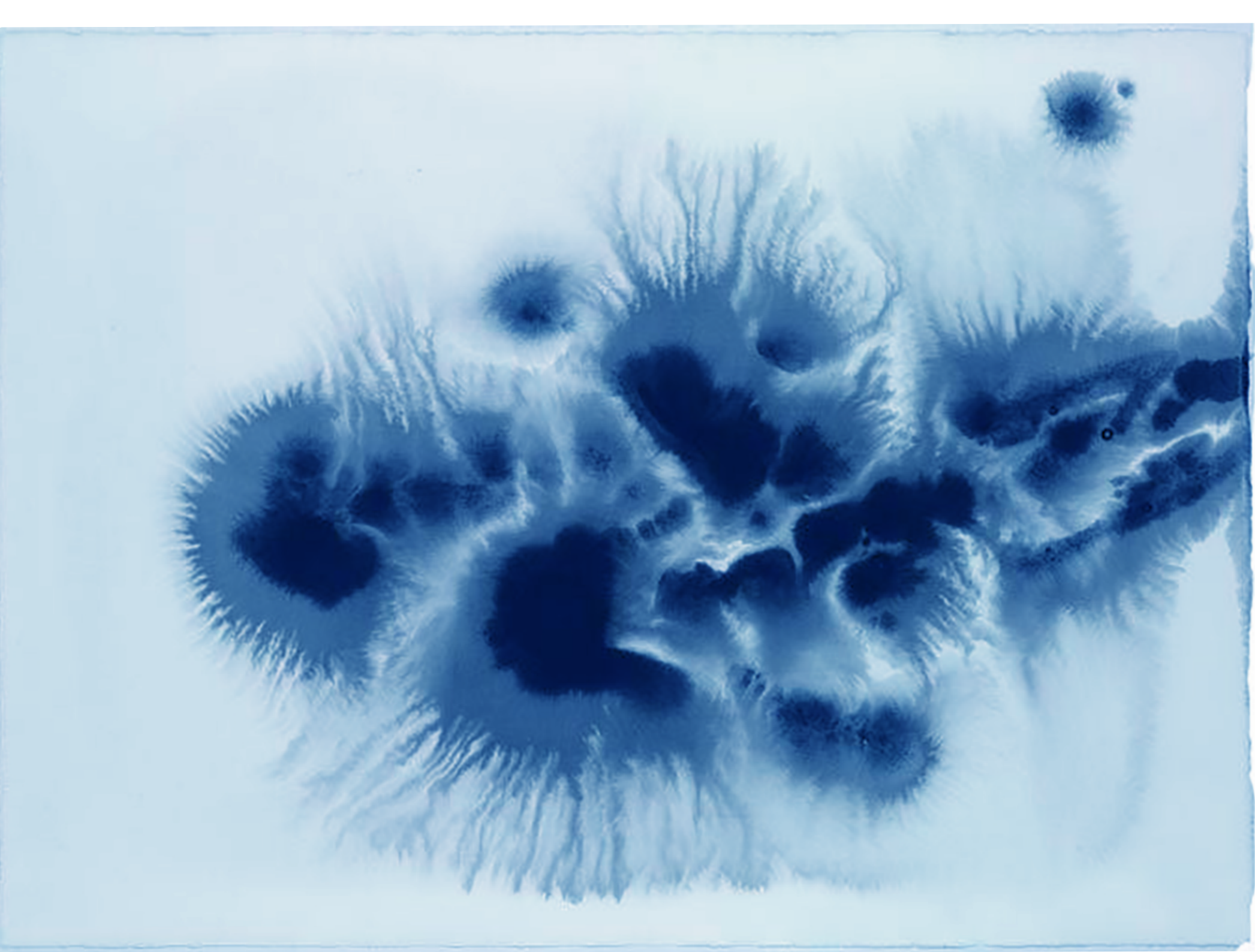
Natasai Audrey Chieza



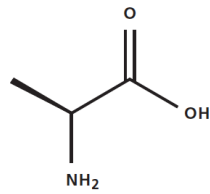
Develop a Cipher language for CRISPR - Cas Encoding

Experiment with medium [Paper, Petri dish, Agar]

Bacteria ink - growth



ENCODED POETICS
Modern applicatios vs Natural philosophy



conquerors, having harrowed hell –
come home
*(no hummingbirds have
copied our opulent hymns)*

Alanine ($\text{C}_3\text{H}_7\text{NO}_2$)

*natura
non
facit
saltur*

the nucleotides

A [is for Adenine][10]

natura

C [is for Cytosine][00-0]

non

G [is for Guanine][01]

facit

T [is for Thymine][11-1]

saltur

5'

natura

1101110	1100001	TGTGACG
1110100	1110101	TAAGTGG
1110010	1100001	TAGGACG

non

1101110	TGTG
1101111	GATT
1101110	TGTC

facit

1100110	1100001	TCTGACG
1100011	1101001	TCGTGAG
1110100		TAAC

saltur

1110011	1100001	TAGTACG
1101100	1110100	TGAGTGC
1110101	1110010	TAATTCA

3'

'DNA
is
a
metamorphic
scriptorium,
where
life
transcribes,
by
chance,
whatever
life
has
so
far
learned
about
immortality'







'The word is now a virus'

William S. Burroughs

[Nathier Fernandez -Citizen science - 2018]