



Visualizing Science: Crafting Memes in Design Pedagogy

Design Commit
1ST INTERNATIONAL CONFERENCE ON DESIGN AND INDUSTRY

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Visualizing Science: Crafting Memes in Design Pedagogy

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ID+ — Unexpected Media Lab
Faculty of Fine Arts, University of Porto, Portugal

CONTEXTUALISATION

Nine pedagogical workshops in design courses at Portuguese universities

Infographics, reels, data comics and memes

Exploratory Project Sci-Bi



ID+ RESEARCH
INSTITUTE FOR
DESIGN, MEDIA
AND CULTURE
PORTUGAL

An Infodemic of Disorientation: communication design as mediator between scientific knowledge and cognitive bias.



A project by LUME: unexpected media lab
2023/24

PROBLEM DEFINITION

The exponential rise of social media use has potentiated a range of phenomena such as fake news or pseudo-science

The recent pandemic and corresponding public policies potentiated the proliferation of a range of misinformation

HYPOTHESIS

The primary hypothesis is that integrating design principles with scientific knowledge can enhance clarity and engagement.

A large group of approximately 25 students are posed in a workshop or classroom setting. They are arranged in several rows, with some standing and others sitting or kneeling in the front. The students are dressed in casual attire, including t-shirts, hoodies, and jeans. The background features a whiteboard with diagrams, a desk with various items, and a window with a grid pattern. A semi-transparent black box with white text is overlaid on the center of the image.

EXPLORATORY WORKSHOPS

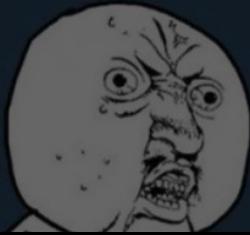
Communication design students can play a vital role in translating and visualizing scientific information in a clear, accessible, and engaging manner.



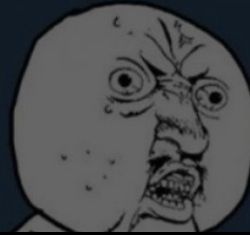
HUMOUR

Memes, being a popular form of internet humour, offer a visually engaging and concise way to convey complex scientific concepts.

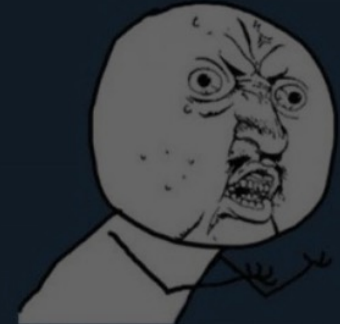
Sci-Bi presents
Y U NO TRUST



Sci-Bi presents
Y U NO TRUST



Sci-Bi presents
Y U NO TRUST



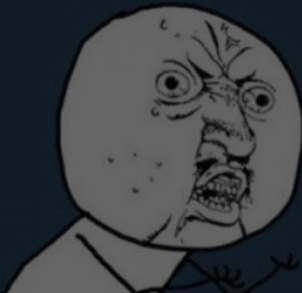
SCIENCE???

A LUME/ID+ exploratory project
funded by FCT

MEMES

Encapsulating scientific ideas within a simple, humorous framework.

Y U NO TRUST



Y U NO TRUST



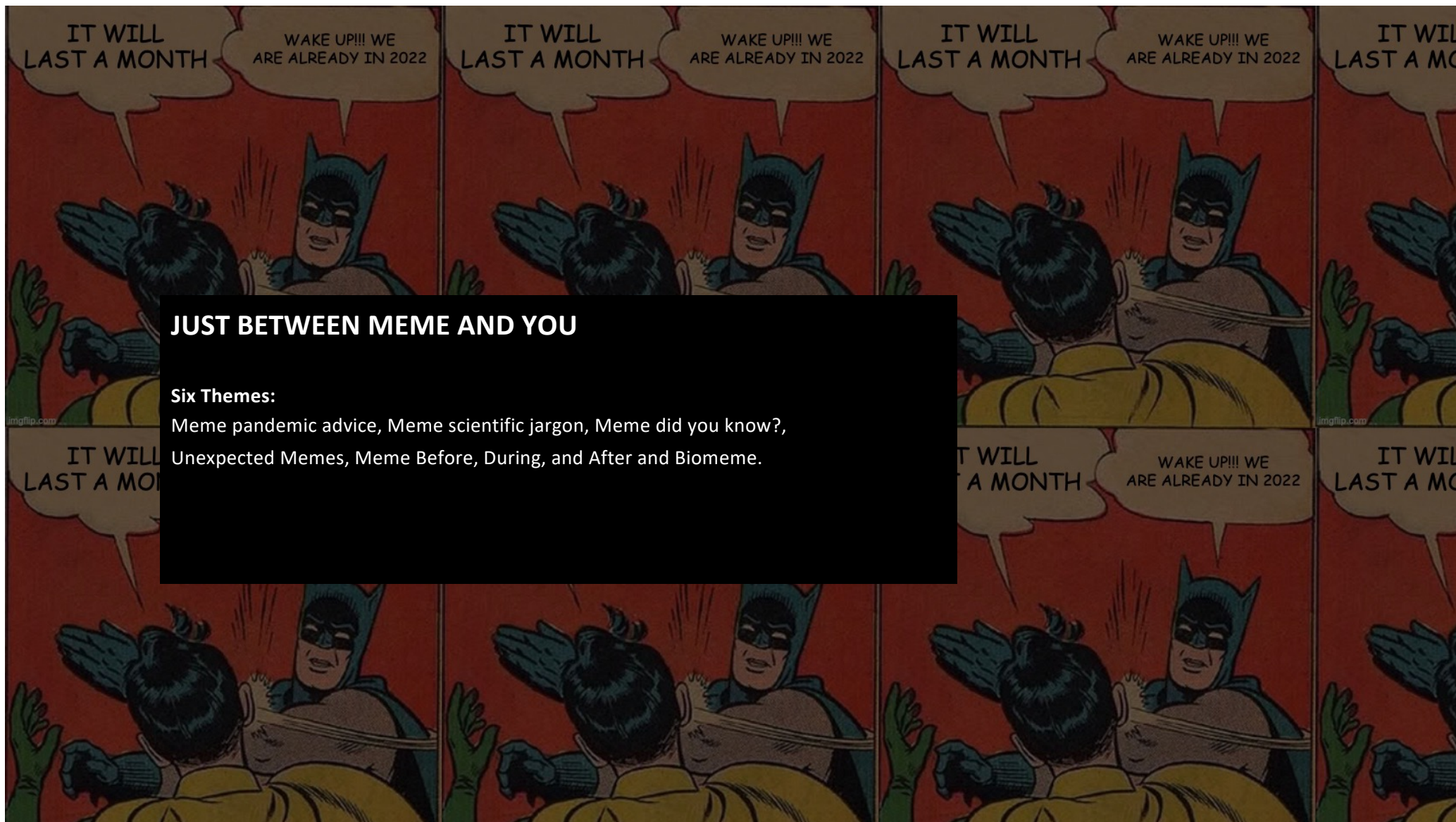
Sci-Bi presents
Y U NO TRUST



A top-down view of a person's hands holding a pen over a desk. The desk is cluttered with various school supplies, including a smartphone, several pens and pencils, and a pencil case. The person's hands are adorned with rings and a scrunchie. The background is slightly blurred, focusing attention on the hands and the desk items.

FROM RESEARCH TO DESIGN PEDAGOGY

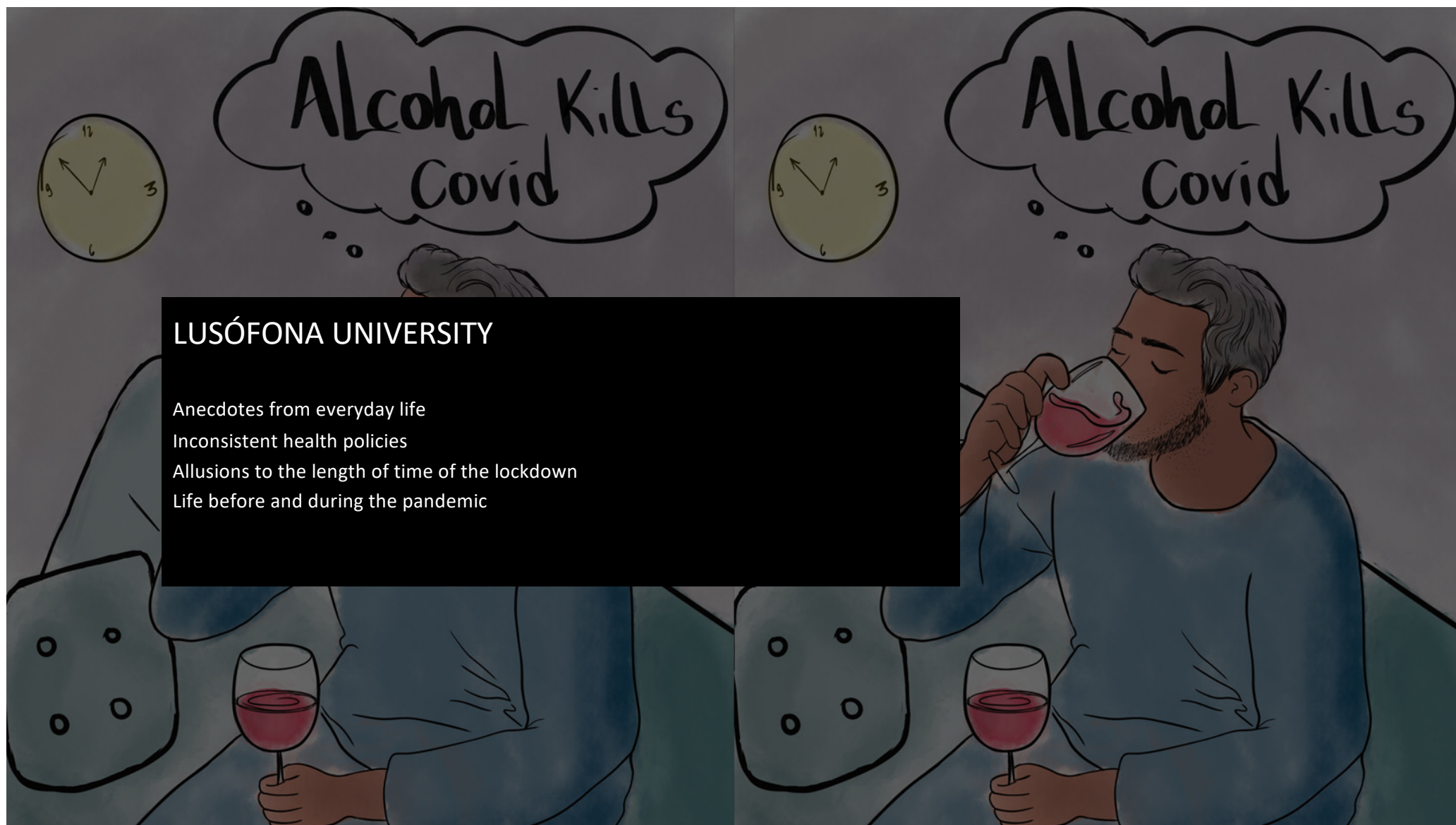
The classroom is highlighted as an ideal setting to observe emerging communication dynamics among younger generations.



JUST BETWEEN MEME AND YOU

Six Themes:

Meme pandemic advice, Meme scientific jargon, Meme did you know?, Unexpected Memes, Meme Before, During, and After and Biomeme.



LUSÓFONA UNIVERSITY

Anecdotes from everyday life

Inconsistent health policies

Allusions to the length of time of the lockdown

Life before and during the pandemic



SCHOOL OF ARTS AND DESIGN CALDAS DA RAINHA

Pandemic advice

Scientific Jargon

Did you know?: an interesting or surprising fact about the pandemic

Before, During and After

My Bioreel: a personal episode

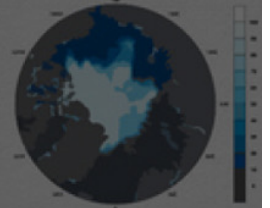
UMA TEORIA DA CONSPIRAÇÃO

FACULTY OF HUMANITIES, UNIVERSITY OF PORTO

Facilitate the production of infographics based on conspiracy theories surrounding Covid-19.

geio da região tropical contribuiu para o fenómeno.

60 a 80 cm
até ao final do século



ALTERAÇÕES climáticas

principais fontes de
CO₂

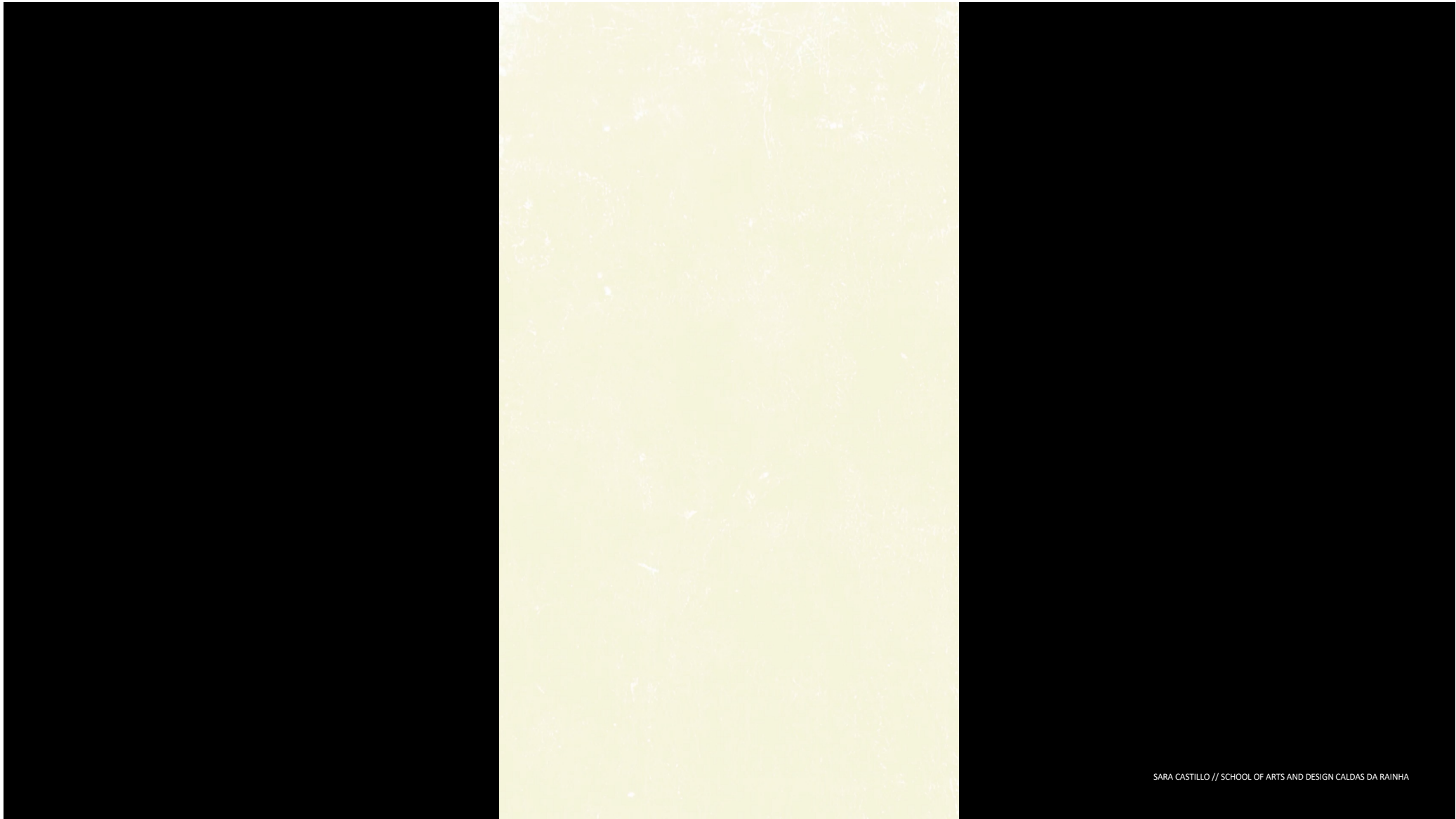


VARIAÇÕES naturais

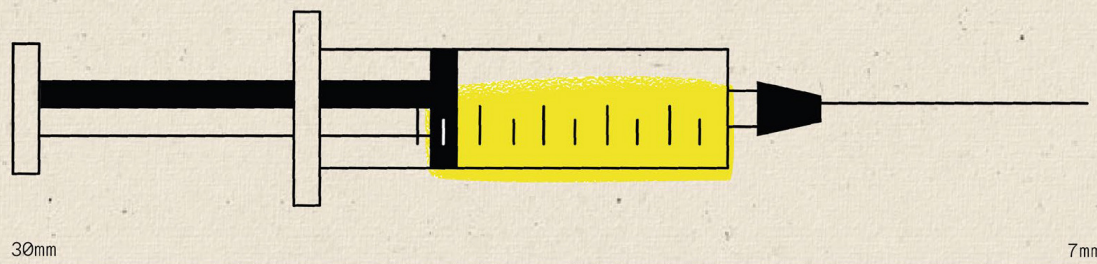




POV: ITS BEEN 3 YEARS
SINCE WE ARE RUNNING
FROM COVID



VACINAÇÃO CONTRA COVID-19

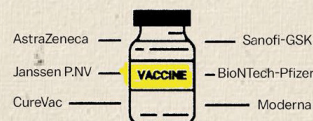


MONITORAMENTO DE SEGURANÇA

As vacinas são rigorosamente avaliadas para garantir sua segurança antes de serem aprovadas para uso. Sistemas de farmacovigilância monitoram a segurança das vacinas após a sua distribuição em larga escala.

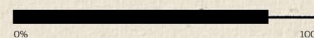
QUAIS AS VACINAS DISPONÍVEIS?

Atualmente, existem várias vacinas autorizadas e em uso contra o COVID-19 em diferentes países ao redor do mundo. Aqui estão algumas das vacinas mais amplamente conhecidas:



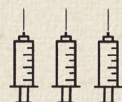
IMUNIDADE COVID-19

É preciso que uma grande percentagem de portugueses tenha desenvolvido anticorpos para que o seu organismo consiga combater o vírus.



O intervalo entre as doses pode variar dependendo da vacina

90%



A terceira dose da vacina tem como objetivo fornecer uma resposta imunológica adicional, fortalecendo a proteção contra o vírus.

VACINAÇÃO CONTRA COVID-19

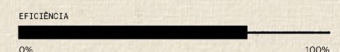
A 10 de janeiro de 2020 foi sequenciado e partilhado com toda a comunidade científica o primeiro genoma do SARS-CoV-2. Desde então, farmacêuticas e empresas de biotecnologia lançaram-se em busca de uma vacina contra a covid. Conseguiram em menos de um ano o que normalmente leva uma década a alcançar.

Todos os dias milhões de pessoas recebem a dose da vacina que se espera vir a pôr fim à pandemia. As vacinas da Pfizer/Biontech e a chinesa Sinopharm foram as primeiras a serem usadas de forma generalizada em países como o Reino Unido, os Estados Unidos ou os Emirados.



EFICIÊNCIA DA VACINAÇÃO

As vacinas contra o COVID-19 têm mostrado alta eficácia na prevenção da doença. Elas reduzem significativamente as chances de infecção e ajudam a evitar complicações graves.



Uma só dose tem eficácia de 57% na proteção de infeções sintomáticas após duas semanas.

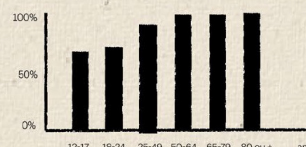
POPULAÇÃO VACINADA



Os países da UE, asseguram o direito de adquirir um número suficiente de doses, num determinado prazo.

DISTRIBUIÇÃO POR GRUPO ETÁRIO

Pessoas vacinadas com pelo menos uma dose e com vacinação completa, por grupo etário. Não inclui doses de reforço.



WORKSHOP OBSERVATIONS

- Lack of enthusiasm when it comes to retaining information related to COVID
- Prioritize a comprehensive understanding of overall health instead of focusing on COVID
- Students have developed the ability to assess and distinguish reliable sources of scientific information

WORKSHOP OBSERVATIONS

- Heightened awareness of personal hygiene practices
- Shift in students' attitudes towards public health
- Collaborative learning play a significant role in enhancing students' understanding of health-related topics

WORKSHOP OBSERVATIONS

- Greater appreciation for the interconnectedness of global health issues
- The integration of technology and online platforms has facilitated the dissemination of accurate health information
- Students express a desire for more practical and hands-on activities related to health

EXHIBITIONS 4 + 1

Memes, reels, and infographics are being showcased in public exhibitions



Exhibition 1

Y U NO TRUST SCIENCE???: engaging with post-digital audiences on the subject of reliable scientific knowledge.

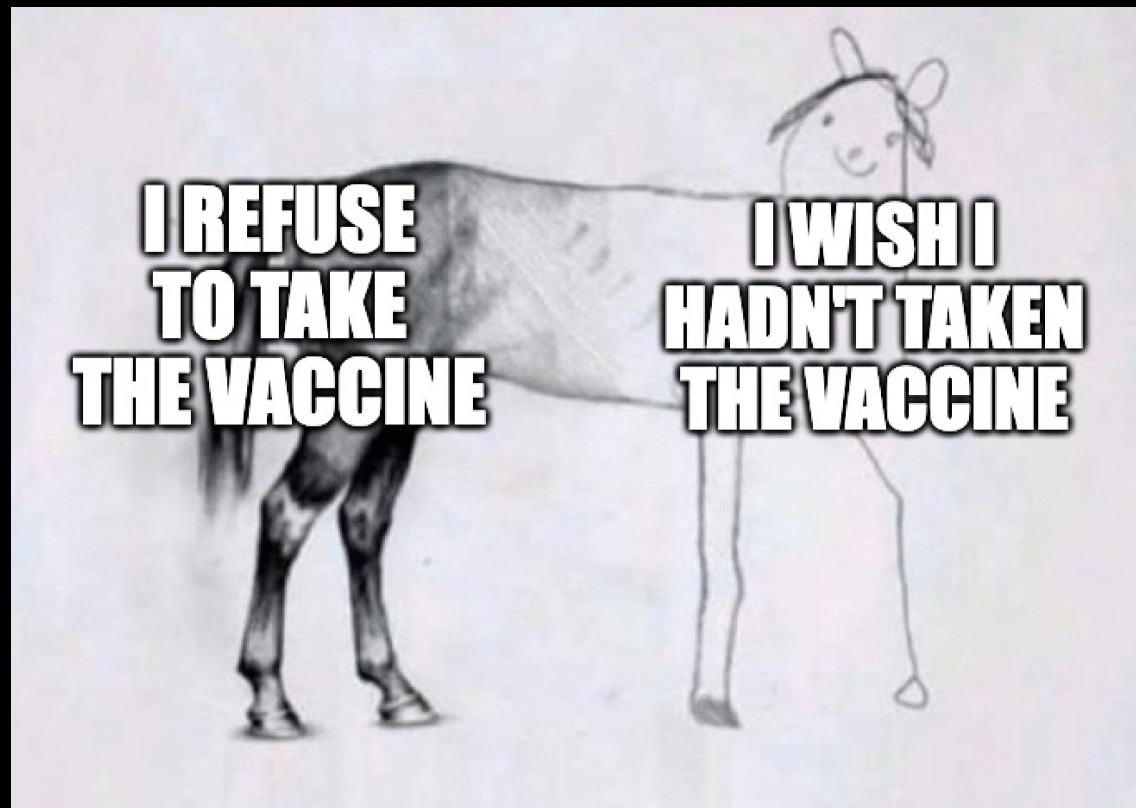
International Visual Methods Conference

Transition: Preparing for the Next Generation

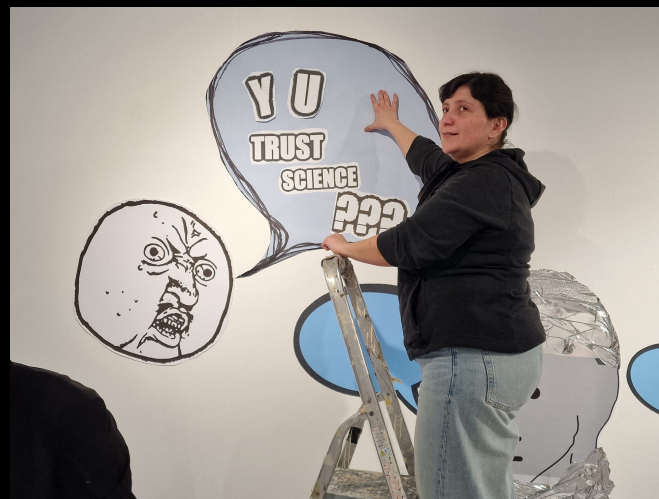
IVMC8: Sapienza University, Rome 29-31 May 2023

**I REFUSE
TO TAKE
THE VACCINE**

**I WISH I
HADN'T TAKEN
THE VACCINE**



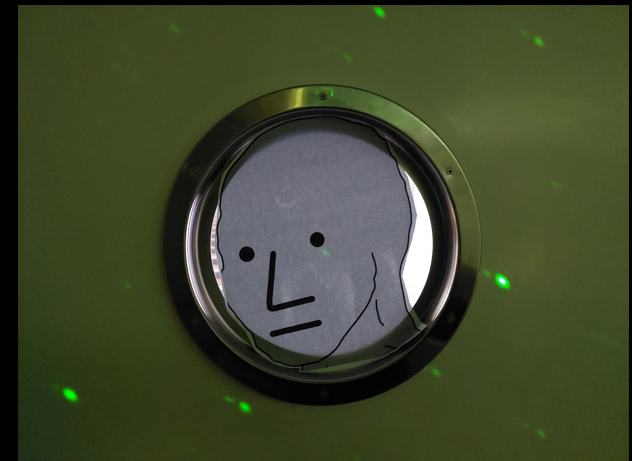
Exhibition 3
MAUS HÁBITOS
7th – 31st March 2024



Exhibition 4

UPTEC BAIXA

22nd April – 3rd May 2024





Exhibition 5:4 July- September 2024

i3S - Instituto de Investigação e Inovação em Saúde

Thank you!

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