

SCIENCE

GALLERY

YOUTH
SYMPOSIUM
2021

BOREDOM

REBELLION

Foreword

At the 2019 Youth Symposium we brought together in London 40 advisors, mediators, staff and core audiences of Science Gallery, to discuss the core principles and initiatives that have been shaping our work over the past year.

One of the major themes that emerged was the importance of global connectivity: the only way to tackle the big issues in our societies is by sharing resources and coordinating our actions.

The Covid-19 pandemic has upended our lives, but it has also given us an opportunity to seriously act on the message our audiences gave us.

The 2021 Youth Symposium was a true global event bringing together over 500 people from across the globe. In 2019 the sessions were a reflection on the current work of the galleries; this year the outstanding program of 18 sessions let us see into the future of what culture and education mean to young adults.

This generation is paying an incredibly high toll because of the pandemic. Their present has been wiped out; their future has been made even more uncertain. And yet this generation is proving to be the most resilient, optimistic and enthusiastic, and they gave us an amazing demonstration of creativity and global cultural relevance.

Across three days we created a space for conversations on topics ranging from storytelling and Afrofuturism to security, privacy and manipulation; from how Facebook is an open book about our relationships, to philosophy & psychiatry and social media addiction. We defied timezones discussing recycling, food culture, accessibility and design thinking, entropy and randomness, speculative design, meditative practice and creativity, fake news, science and theatre, algorithms & AI, zine culture, and even found time for a good old Jeopardy Spectacular. To kick off the Symposium, World Economic

BOREDOM REBELLION

Forum cultural leader Jesse Appell brought us on a journey of improvisation and communication skills which are still echoing with us; the closing act was a mind opening workshop on Misbehaving Algorithms by Tactical Tech, the international NGO leading the conversation on technology and society.

These were not simply sessions and workshops: the talent we saw across three days were true gems of creativity and ingenuity. In addition to the official program, 50 community boards were initiated to continue the conversations after the official sessions. On both content and methods we witnessed the power of our participants to turn boredom into creativity, with a remarkable capacity to cope with the present and to shape the future.

The Youth Symposium was the platform for a participatory research project led by The University of Melbourne on “being Sci Curious” aiming at understanding the benefits of engaging with Science Gallery. We pioneered also a mentorship scheme pairing Science Gallery staff with Symposium participants. This program, like the whole Symposium, was an astounding success and a blueprint for future initiatives.

Organising a global event wasn't a small feat: I take this opportunity to wholeheartedly thank the SGI executive team, the Youth Symposium committee, and the whole Science Gallery Network who did a fantastic job to produce the event; the volunteers who helped during the sessions, ensuring 24/7 support to all participants; and all the speakers and mentors for the extraordinary content. Most of all, a big thank you to the hundreds of participants: the feedback we received, which you can find on p. 34, is a testament of how remarkable the event was for those who attended.

I hope you'll enjoy this report, which documents the energy and capacity of this event.

Andrea Bandelli, Executive Director

BOREDOM REBELLION



The BOREDOM REBELLION programme of workshops, performances, and talks invited our audience to break the monotonous routine and create together in a virtual space. Participants reimaged their bedrooms with AI-driven tools, envisioned the world through afro-futurist lenses in a card building game, and more; all from the comfort of their homes, in sessions that were created by and for our core audience of young adults.

BOREDOM REBELLION was Science Gallery's 2021 iteration of its annual Youth Symposium — a gathering of advisors, mediators, staff and core audiences of Science Gallery. Youth Symposium participants trust Science Gallery to take action on pressing issues that include climate crisis, mental health, ethics and technology. And they trust Science Gallery to be a truly global network. The gallery space is too small for them: the Youth Symposium participants want Science Gallery to achieve an impact that is much larger than the walls of a gallery. They dare to look far beyond where we can see. This year, they explored scientific language in a theatrical way, converted their social media data into visual designs, got closer to nature by making biodegradable seedling pots, challenged their trust in science in a live podcast, designed a theme park exploring radical models of accessibility, pushed their creativity through randomness, experienced the cultural value of food, documented their memories for future generations, and performed in an immersive theatre play to reflect on data privacy.

YS Committee and Volunteers



Ana Álvarez Prendes



Annachiara Panzeri



Caroline White



Claire Farrugia



Cliodhna Ryan



Corrin Foley



Grace D'Arcy



Inger van Dijk



Jahitza Balaniuk



Jenna Heaton



Joe Panama



Katrina Enros



Lucy Whitaker



Madhushree Kamak



Niamh O'Doherty



Róisín McGannon



Rory McCormick



Shaun Ussher

BOREDOM

REBELLION

by the Numbers

2021



3rd

Annual Youth
Symposium event

11

Participant Countries represented:

Argentina
Australia
Belgium
Canada

Germany
India
Italy
Ireland

Netherlands
UK
US

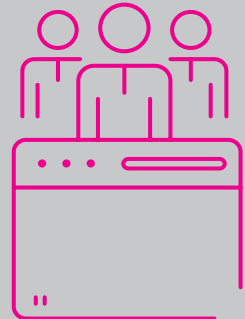
527

registrants



423

session attendees



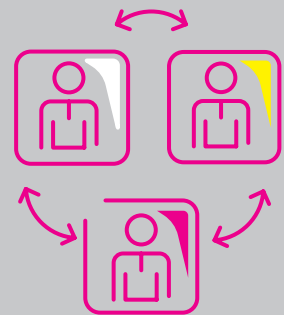
166,577

university member impressions



50

community board topics started (including Wanderlust, Foodies, Gardening, and Pandemic & Boredom)



1,174

messages between attendees



91%

of announcements sent to attendees were opened



35

speakers



The Mentorship Programme

This year, we offered a mentorship programme to our youth facilitators in order to offer guidance and help to refine their ideas. We matched nine different teams with Science Gallery staff and associates, creating lasting connections and important learning experiences for both mentors and mentees. All of our surveyed mentees agreed that the mentorship programme helped improve their session, and all intend to stay in touch with their mentors.

"[My Mentor] is a very bright and thoughtful [...]. He gave me a lot to ponder and pushed me in directions I probably would not have found on my own."

— Science Gallery
Mentee

YS Mentors



Andrea Bandelli



Sarah Durcan



Sophie Perry



Mark Sullivan

100% of mentees felt their session was improved by working with their mentors.

100% of mentors and mentees plan to stay in touch post-Youth Symposium



Shaun Ussher



Esther Lie



Laura Joy Pieters



Tilly Boleyn



Madhu Kamak



Aisling Murray

“Great suggestions to boost engagement or put creative twists. Useful thought provoking questions that expanded the original idea.”

— Science Gallery Mentee

“I probably learned more than my mentees from this experience! They challenged me to dig into topics and issues which I found really interesting and fulfilling. And we had a blast at the YS session.”

— Science Gallery Mentor

“[My mentee] was so dedicated and open to feedback about the structure of the workshop, and how to make it more engaging for the audience. I was really impressed with how much she took on board from one meeting to the next.”

— Science Gallery Mentor

Research: **THE GAME**

This year's Youth Symposium featured the opportunity to contribute to a research project originally begun by University of Melbourne researchers with Science Gallery Melbourne's Sci Curious members. At **BOREDOM REBELLION**, this research project manifested as **THE GAME #BeingSciCurious**.

THE GAME was co-designed by an intergenerational co-research team from The University of Melbourne, Science Gallery Melbourne, and Science Gallery's Sci Curious advisory committee to explore Sci Curiosity through creative play. Sci Curious are an advisory committee aged 14-25 that inform and shape the future of Science Gallery exhibitions, public events and programs. Science Gallery Melbourne is a new addition to the cultural sector in Australia which shares Science Gallery International's mission to ignite curiosity science and art collide.

Knowledge of young people's attitudes towards creativity and innovation is a vital component of Science Gallery Melbourne's mission to facilitate art and science collisions - and as a venue that aims to spark curiosity among young people.

Team members:

UoM: Dr Kathryn Coleman, Dr Niels Wouters, Dr Jenny Martin, Dr Lea Campbell and Dr Sarah Healy, Dr Amanda Belton
Sci Curious co-research team: Ana Ward-Davies, James Urlini, Emily Painter, Jack Chan, Brandon Iredale, Juetheng Soo, Jarrah Shubsmith, Catriona Nguyen-Robertson, Julia Both, Branislava Godic

Co-research partner (UoM):

Social & Cultural Informatics Platform (SCIP)

Co-research partner (external):

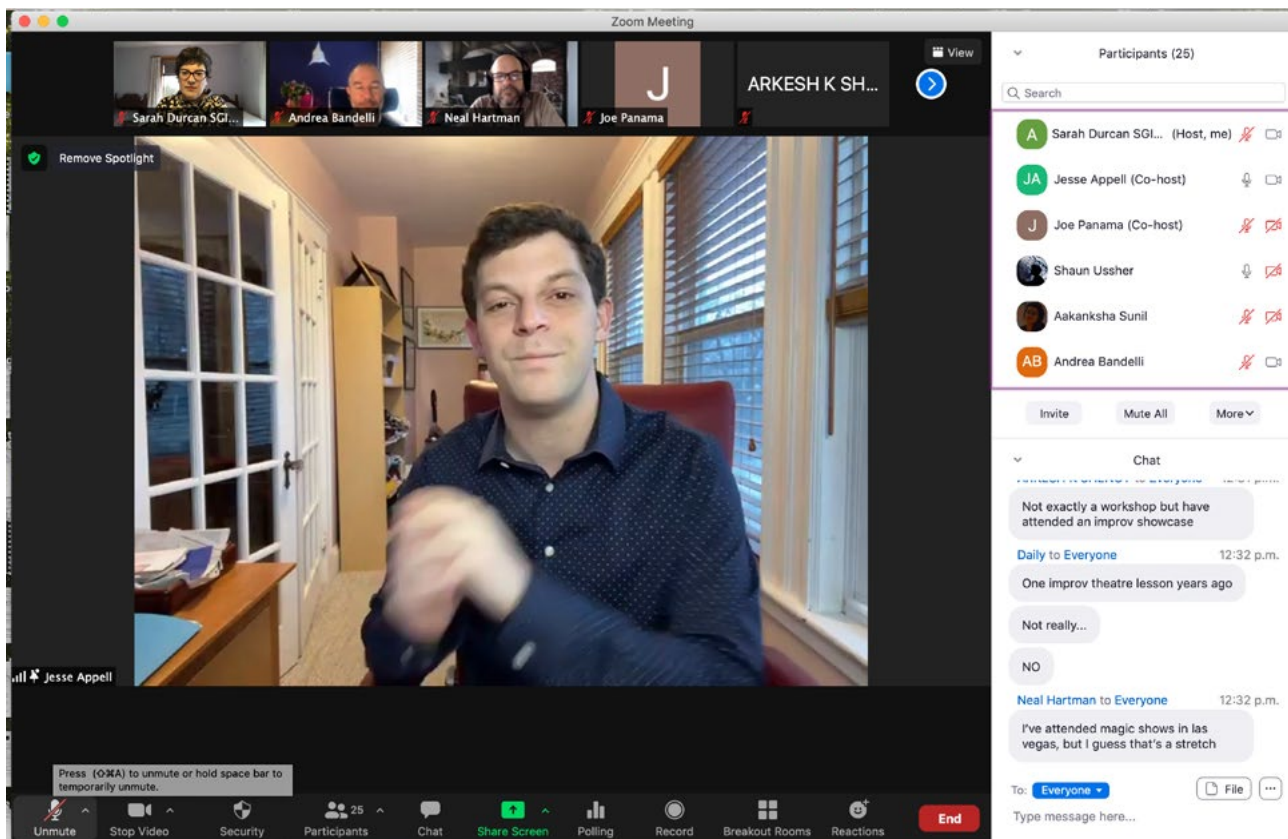
Samuel Peck, tet[R]ad: Draw and Play Here

The SESSIONS

A Comedian's Class on Group Creativity: How to "Yes, And" Your Way To Better Collaboration x 1 session	14
Afro-Rhythms from the Future: a World Building Game x 2 sessions	15
Contagious ideas x 3 sessions	16
Democracy.Privacy.Security x 1 session	17
Digital Relationships x 1 session	18
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INFINITE SCROLLING: What are you scrolling for? x 1 session	20
Making boredom disappear x 1 session	21
Passing the baton for an Edible Relay x 1 session	22
Radical Access Theme Park x 1 session	23
Radical Randomness: An Exploration of the Stochastic Creative Process x 1 session	24
'Speculative Thinking - imagining possible futures in times of isolation' x 1 session	25
Stillness and the Creative Mindset x 1 session	26
Struth! Is that the truth? x 2 sessions	27
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A Comedian's Class on Group Creativity: How to “Yes, And” Your Way To Better Collaboration

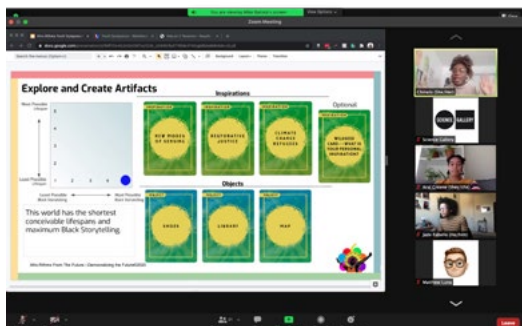
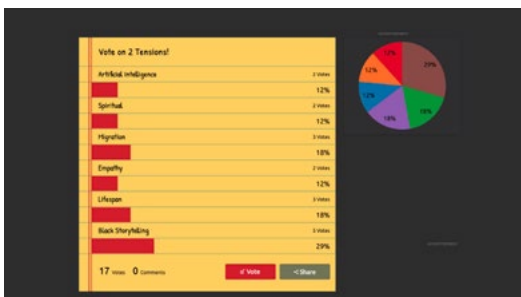
Facilitator:
Jesse Appell



Intercultural comedian Jesse Appell led this workshop on how to use the communication skills behind improvisational comedy to better your teamwork and creative communication. Through interactive group games, Jesse shared the power of accepting and building upon the ideas of teammates — known as “Yes, And!” thinking — to unleash the creative power of groups.”

Afro-Rithms from the Future: a World Building Game

Facilitator:
Chinelo Ufondu



In a world bound by the racialised histories of our past and continuously affected by the biased structures of the present, the future is what is still undefined. Our generation understands that not only can we shape our personal futures, but the shared future we all aspire to live in. The ability to change, democratise, and allow our radical imagination to give us agency over the future while living through the present serves as the premise for Afro-Rithms from the Future. Through playing this collaborative storytelling game, young people around the world navigated our everevolving social, digital, and media-filled contemporary landscapes with a mind towards innovation and in the spirit of a future we want to see. The game asked players to set up world scenarios informed by a set of tensions in the meta-sense, which were then populated by artifacts from the future, referencing objects and inspiration in our present. Players were challenged to imagine new worlds and build responsive solutions for a future that not only includes, but amplifies the voices of those usually overlooked. Developed by The AfroFuturist Podcast co-creator Lonny J. Avi Brooks, game designer Eli Kosminsky and activated in the live by Ahmed Best, the game provided players with the tools to actualise their imaginations and propose a foundation for futures to be built upon.

Contagious Ideas

Facilitator:

Madhushree Kamak, Komal Jain (Science Gallery Bengaluru)



Contagious Ideas was an opportunity to participate in a design lab — a place where you can cook up new ideas and experiment with them. During this three-day workshop, the Science Gallery Team and young people from around the world selected and worked on design challenges from ideation all the way through to testing.

Contagious Ideas was a three-part design sprint workshop where young adults tackled unique design challenges within the theme of “Contagion”. The participants came up with detailed concepts to tackle the challenge of fake information. While one group conceptualised an open event series for journalists and the public to have critical conversations around fake news, the other group explored structured news and information distribution in their college campus through an application. The workshop closed with the participants creating a list of critical questions to be asked, if these concepts were taken to the prototyping stage.

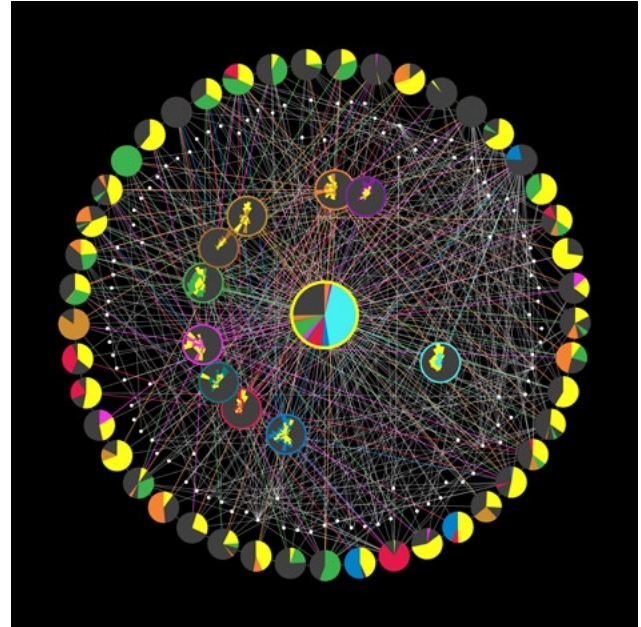
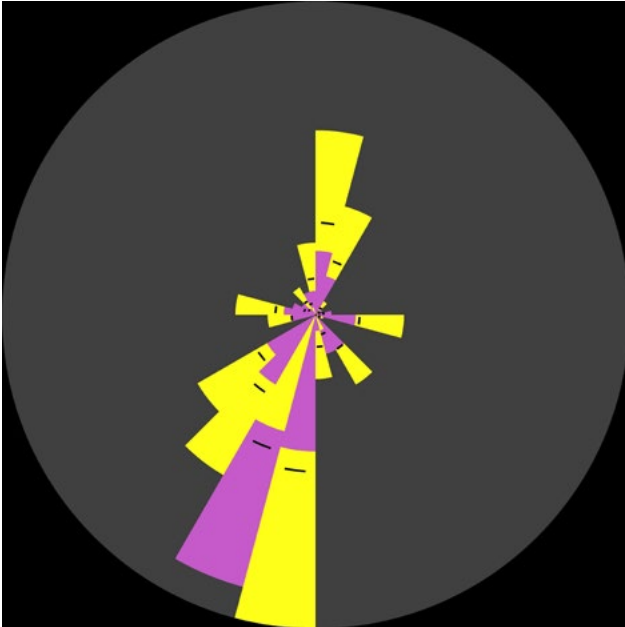
Democracy.Privacy.Security

Facilitator:

Raina Bhattacharya



Democracy. Privacy. Security. What comes to your mind when you hear these words? Imagine an overarching entity gathering information through whatever you do. Imagine someone tracking everything about you: every ad you clicked, which restaurant you ate, what is your favourite TV, whom you love, what is your blood group, what is your medical history. And using that information to create a profile of you — determining who are you based on your preferences. And then using that information to effectively discriminate against some people. What would happen in a dystopia where this information is collected indeterminately, and analysed to create lived experiences for you? Participants discovered how their data may be potentially misused and lead to profiling and discrimination.



During this workshop visualisations were created from social media messaging data from Facebook. Participants explored some of the process behind creating visual information from their raw data, before walking through the creation of their own personalised visualisations using an interactive website specifically built for the Youth Symposium.

<https://tjd45.github.io/Digital-Relationships/>

From Boredom to Wisdom

Facilitator:

Mediators, staff,
young advisors of
Science Gallery
Rotterdam

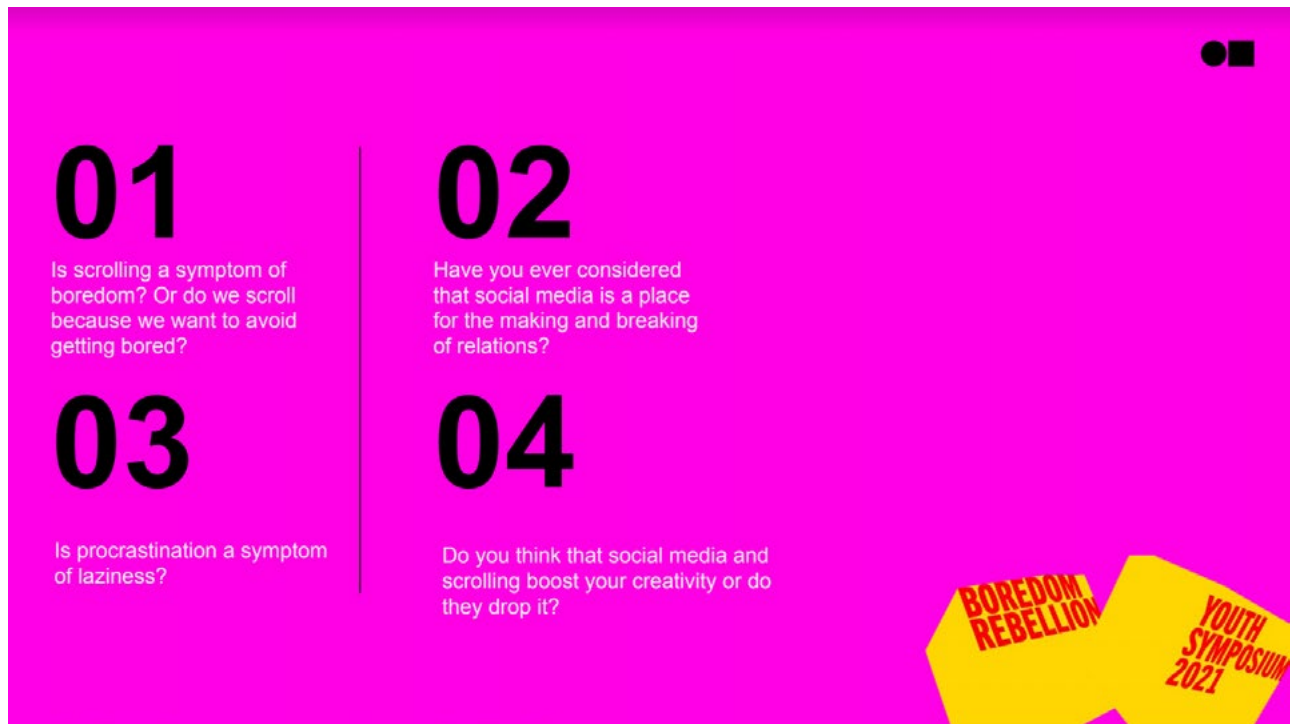


What is our view on boredom nowadays? While boredom has become an unpopular term, and perhaps even a taboo in the 21st century, it is still necessary for our brains to work. What does boredom actually do for our brain and how does it connect with our creativity? Shouldn't we be more bored more often? And a more important question, how can we become 'stars in being bored'? In this world we're living in now we have taught our brains to be 'on' all day and we receive a ridiculous amount of stimuli every minute. How can we turn the tide and break the stigma surrounding boredom?

During this session mediators Nizar and PJ spoke with Tim de Mey, professor in theoretical philosophy at Erasmus School of Philosophy, discussing the link between boredom and creativity. Do these two terms go hand in hand with each other? Or does boredom kill our creativity?

INFINITE SCROLLING: What Are you Scrolling For

Facilitator:
Annachiara Panzeri
(Science Gallery
Venice)



Why do we keep scrolling on our social media accounts? What are we really looking for? What can we actually find? Is technology absorbing our energies? What's the impact of this simple and almost unconscious gesture on our overall mental health and well-being? After some meaningful and impactful information, participants were asked to look at their own experiences with technology and social media and investigate these questions.

Making Boredom Disappear

Facilitator:

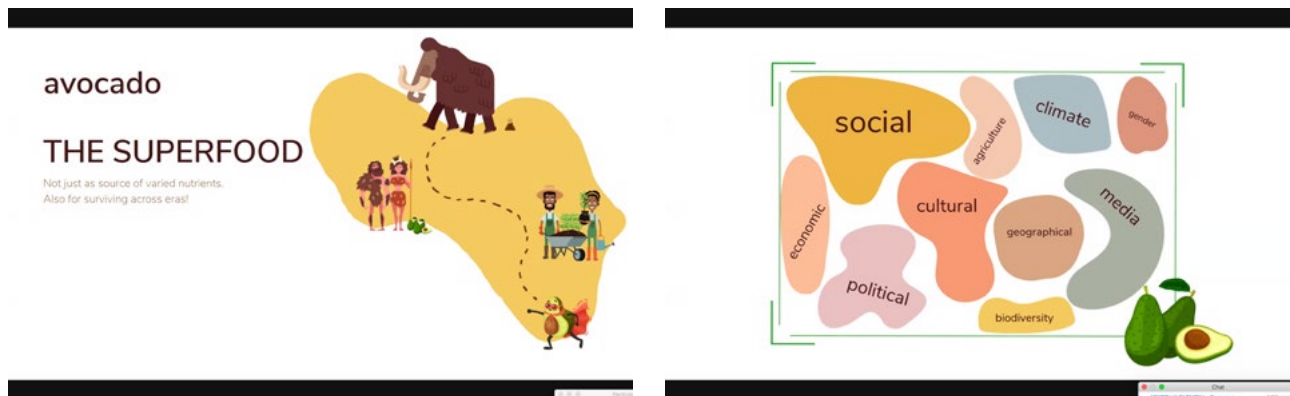
Erin Redmond



This interactive paper crafting workshop focused on how we can play, experiment and make our own fun at home with recycled materials without having to rely on special equipment, expensive materials, a lot of space or on other people. Visual artist and mediator at Science Gallery Dublin, Erin Redmond, guided attendees through the process of making their own practical paper objects which each linked to a hobby that you can do from home. By the end of the workshop they were able to fold their own newspaper pots for planting seedlings, design and create bookmark eyes that can blink and make their own envelopes for sending letters and staying in touch with people in a time where we are encouraged to stay at home.

Passing the Baton for an Edible Relay

Facilitator:
Haripriya Vellodi;
Amrutha Sree

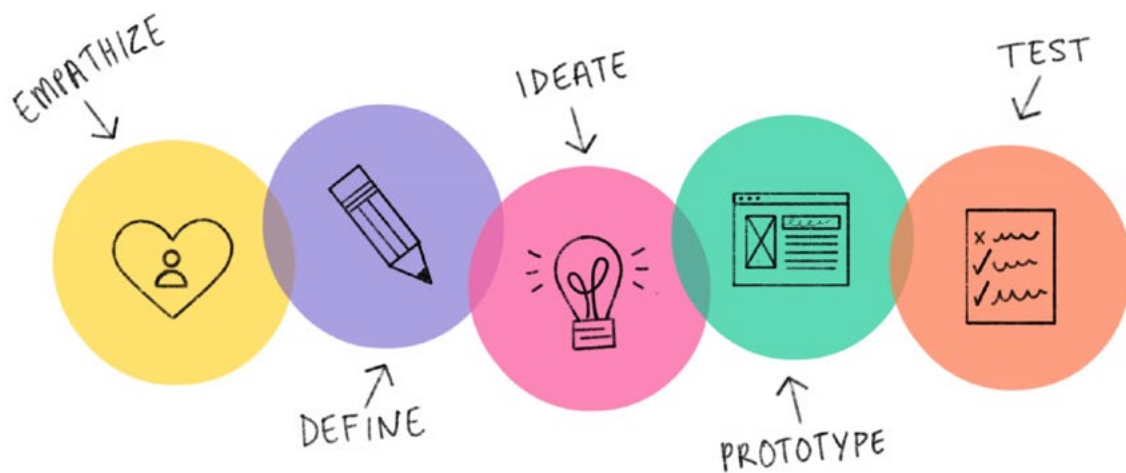


This workshop made participants aware of the cultural, historical and contextual nature of food. We have globally been under lockdown and as a civilisation have understood how close yet far we are from each other. Young adults largely were stranded at their city of work or education, away from their family and/or traditional roots. The only medium to stay connected to their loved ones' memories, tackle with boredom or loneliness and bring in a sense that is even close to normalcy — has been food. Participants took a deeper look into their relationship with food and understood how it influences their thoughts and personality, and not just physical well being. The session was a 'dinner table' where ideas, memories and thoughts could be expressed and listened to, where people could form bonds over their mutual interests and take these connections forward to build a community of thoughtful individuals who can share a meal once in a while.

Radical Access Theme Park

Facilitator:
Fiona Waters

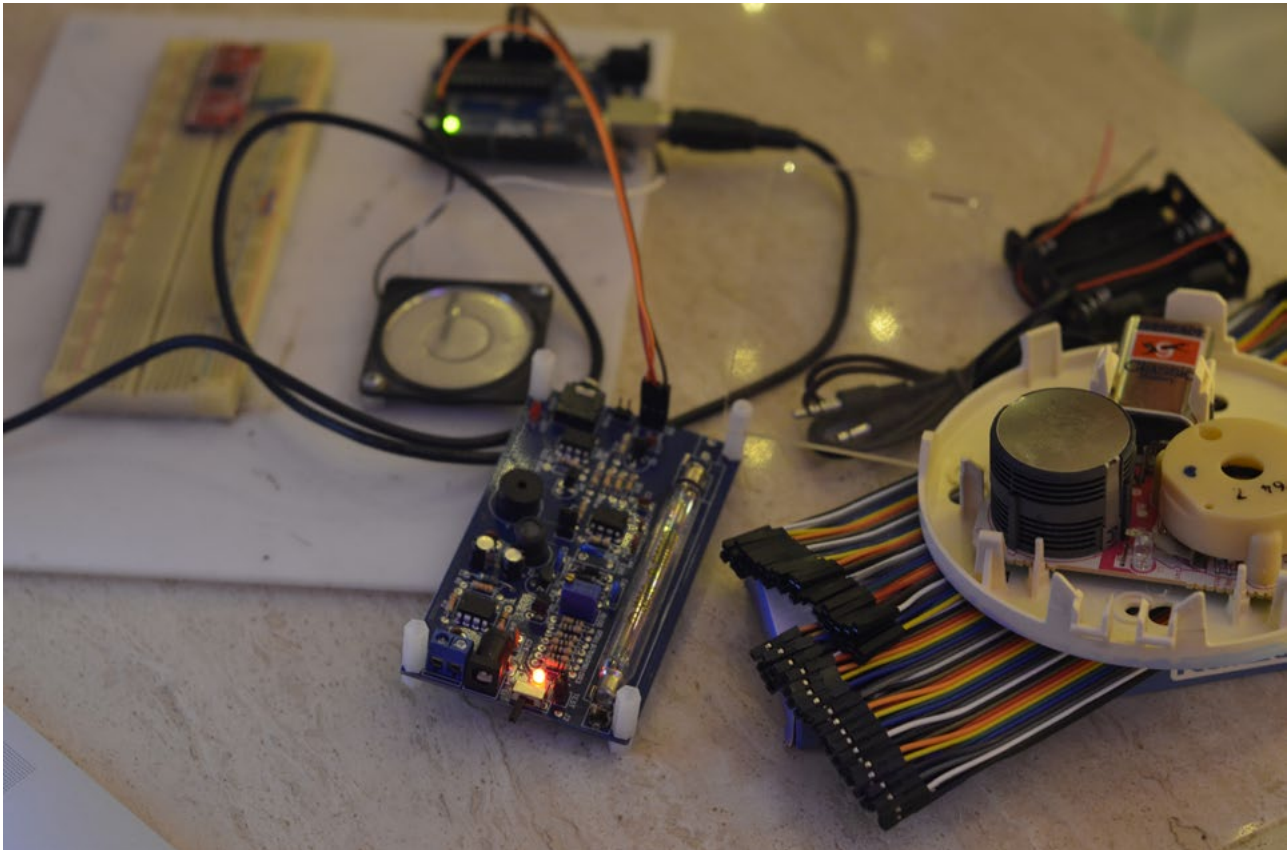
Design Thinking



Create a world of joy that is accessible by all. Radical Access Theme Park was a participative workshop where small teams worked together to create a conceptual radical-access theme park. It began with a brief presentation on the social model of disability, opening a discussion about different types of accessibility considerations from digital to physical, and why society resists radical accessibility. Teams were assessed on the breadth of accessibility considerations included, depth of thought, and their creative solutions to accessibility barriers.

Radical Randomness: An Exploration of the Stochastic Creative Process

Facilitator:
Summer Krinsky



By living in a chaotic ecosystem we are constantly surrounded by inspiration. The main goal of this session was to spark creativity and spread the motivation to make. Participants were given a midi patch, audio file, word list, and numerical sequence created by a random number generator (RNG). In programming, a typical RNG is pseudorandom because its output is determined by the initial “seed.” One method for true randomness is to make the seed itself random. Summer used a geiger counter and an Arduino to measure radiation, sending this purely random seed through Arduino to Max MSP. There is no bolder way to rebel against boredom than by seizing upon the insight of entropy, as true randomness is at the essence of any argument for free will. This workshop explored the creative process by inviting randomness into the writers room.

Stillness and the Creative Mindset

Facilitator:

Shaina Kahn
(Mediator Science
Gallery Atlanta)



Stillness and the Creative Mindset was a two-step workshop led by Science Gallery Atlanta student mediator Shaina Kahn. The first part of the workshop was a foray into meditative practice and the process of sitting in stillness. This section included a guided meditation that was, in turn, broken down into three simple practices: an immersive moment of nurturance, focused breathwork, and the quieting of the mind. The result of the meditative practice put the audience in a mindset that was conducive for creativity. This cultivated creative mindset lead into the second part of the workshop: the worldbuilding activity. After a brief explanation, the audience were separated into breakout rooms with an 'Activity Lead', who guided the audience through a collective exercise to create a detailed, fantastical universe based on group decisions regarding various societal elements (economy, technology, religion, etc.).

Struth! Is that the Truth?

Facilitator:

Catherine Nielsen &
Hannah Thomas



Struth! was an interactive discussion/game which addressed the important issue of trust in science. Originally developed as a podcast, Struth! is a game of 'truth or lie' designed to light-heartedly help players confront the ease with which science can be misconstrued, misunderstood, or just plain old misrepresented, especially on the internet. Over the course of 80 minutes attendees had the opportunity to question their fellow participants and hosts, to try to figure out if what they were telling them was true or a lie. We also heard from some fantastic experts in their fields to hear about the best "fact" they have heard about their field on the internet, how it was spread, and what the effects of this may be.

The slide features a central graphic of a human head profile in silhouette, facing left. Inside the head is a yellow heart with a white plus sign, surrounded by various geometric shapes like a square and a circle. To the left of the head is a line drawing of a theatre stage with two spotlights. Below it is the text: "What is a particularly impactful memory you have of theatre?". To the right of the head is a line drawing of a microscope. Below it is the text: "What is a particularly impactful memory you have of science?". The entire slide is titled "Discovery Task" in a large, bold, serif font at the top. On the right side of the slide, there is a vertical stack of five video call windows. From top to bottom, they show: Shaun Ussher, Sarah Durcan, Katie O'Byrne (the facilitator), Mollie, and Ryan O'Donnell. The windows are arranged in a grid-like fashion, with the facilitator's window in the middle.

What possibilities lie in using theatre to explore science? Neuroplasticity is the ability of neural networks in the brain to change through growth and reorganisation and is crucial in learning and memory. What learnings can be gained from making connections with theatre and science and what impact can it have on the brains of an audience? This 60 minute workshop centred on creating work at the intersection of science and theatre. The workshop explored the fusion of the two approaches to asking questions about the world around us (science and theatre) and the ways in which such interrogations can support each other considerably. Participants were encouraged to create a fledging idea of a project to take away for further exploration.

Misbehaving Algorithms

Facilitator:
Daisy Kidd
(Tactical Tech)

DATA
DETOX
KIT

“algorithms are created for purposes that are often far from neutral: to create value and capital; to nudge behaviour and structure preferences in a certain way; and to identify, sort and classify people.”

Robert Kitchen, 2017

WHAT IS GOING ON HERE?



AND HERE?



How much do we know about the algorithms that shape our lives? What happens when you apply mathematics to the chaos of life?

To answer these questions, you first need to understand that algorithms aren't so radical or new after all. In fact, they've been churning around in our heads for a very long time. In this workshop, through storytelling and discussion, we unpacked how algorithms can reflect the society they're built in and how we can use our history and knowledge to build better ones in the future.

The BORED-GAME

Facilitator:

Shaun Ussher
& Grace D'Arcy
Science Gallery
Dublin

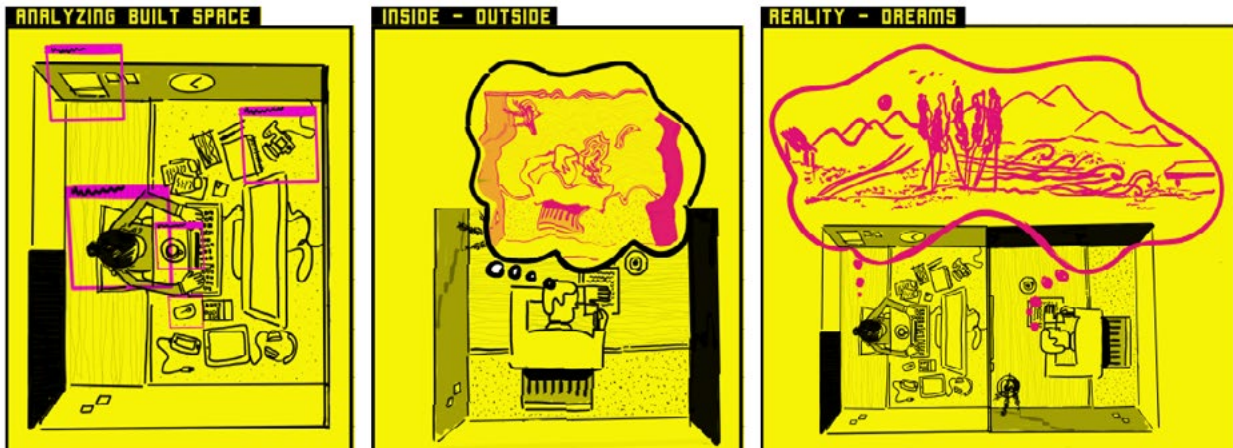


In the year 2052 after society has been isolated for over a quarter of a century The Ultimate BORED-Game was a dystopian-style game show that pushed teams of participants to help develop earth's new societies. The workshop built upon participants' prior experience and facilitated them to creatively express them throughout the workshop in a series of challenges that encouraged participants to design, improvise, communicate and develop a level of systems thinking problem solving. Exploring boredom through youth issues, The Ultimate BORED-Game consisted of four rounds with two teams tackling challenges under time pressure, audience participation to decide the winner, with audience challenges embedded.

TRY THIS AT HOME

Facilitator:

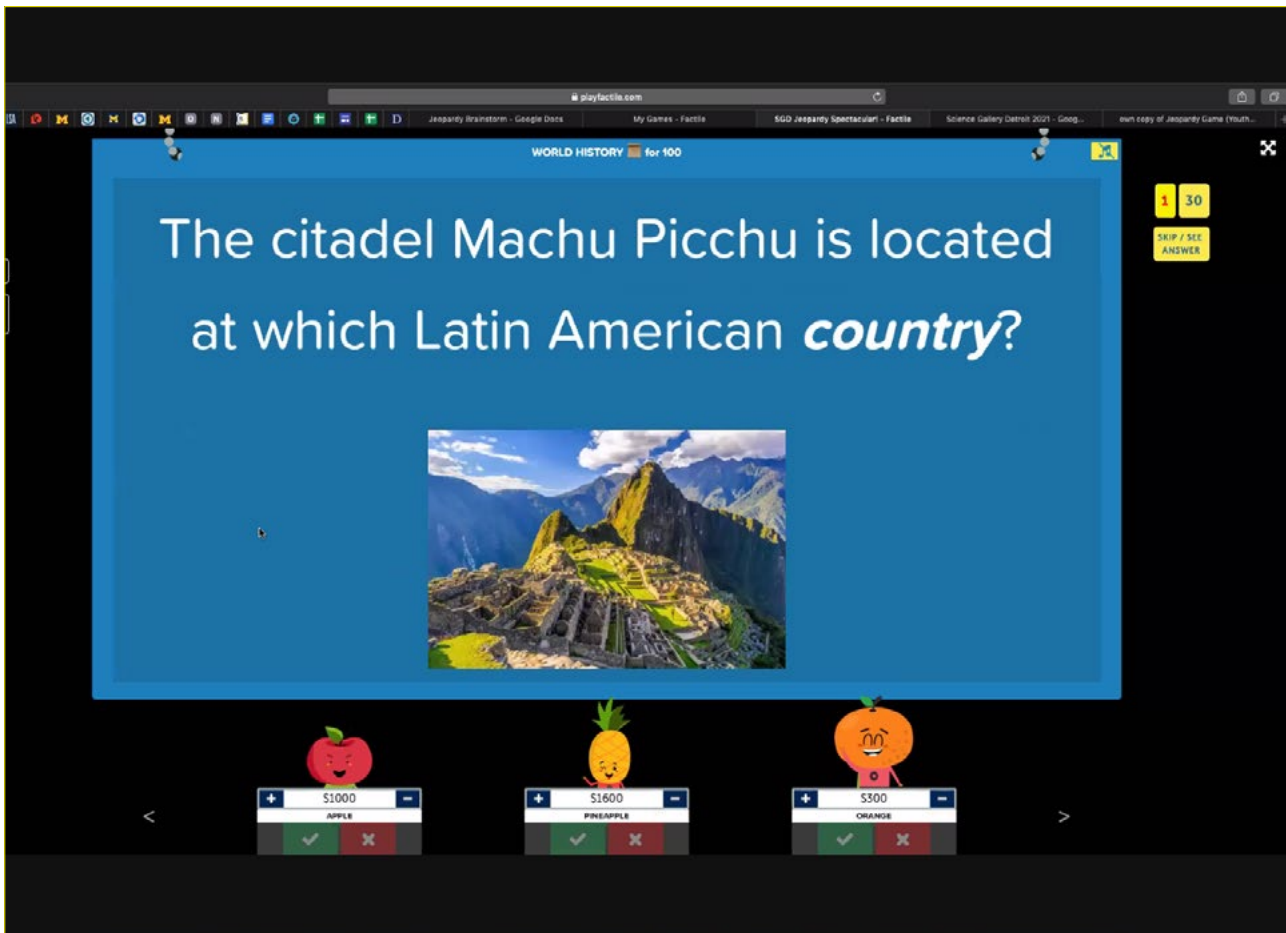
Marsha Bradfield,
Rashmi Bidasaria,
Vinay Khare



TRY THIS AT HOME used open AI programmes to explore the themes of ‘Inside-Outside’ and ‘Reality-Dreams’. Participants went on an adventure to reimagine their built environment — their house, flat, bedroom — without leaving home. They created poem-like texts, artworks and fantastical landscapes to reinterpret their domestic spaces and more fully engage them. By working online with images of our homes — their interiors, exteriors and surroundings — and reframing these views with new and generative technologies, could we see our domestic sphere in new ways? Would this lead us to appreciate our homes more? Maybe live in them differently, with more meaning? TRY THIS AT HOME introduced AI as an opportunity to connect more deeply with each other, our thoughts, values and dreams.

Jeopardy Spectacular

Facilitator:
Science Gallery
Detroit, Mediators



A 'bored' game to stretch the brain and our collective general knowledge, our Science Gallery Detroit team treated us to a Jeopardy spectacular based on the popular US tv format, incorporating questions from all Network locations. Using an online format of the game, participants and their fruity avatars were allocated into rooms to play against each other. Sharp minds and fast buzzer fingers made this a competitive but friendly fun end to a symposium evening. The pineapples won!

SGD Jeopardy Spectacular!

CITIES AROUND THE GLOBE 🌐	WORLD HISTORY 📖	UNDER THE SEA 🐠	SCIENCE 🧪	ART 🎨	A BAKER'S DOZEN (13 LETTERS)
\$100	\$100	\$100	\$100	\$100	\$100
\$200	\$200	\$200	\$200	\$200	\$200
\$300	\$300	\$300	\$300	\$300	\$300
\$400	\$400	\$400	\$400	\$400	\$400
\$500	\$500	\$500	\$500	\$500	\$500


+ \$400 -
PINEAPPLE
✓ ✗



+ \$100 -
ORANGE
✓ ✗



+ \$200 -
LEMON
✓ ✗


UNDER THE SEA 🐠 for 200

4 30
SKIP / SEE ANSWER

These underwater sea creatures are the *oldest* multicellular animals on the planet:


+ \$400 -
PINEAPPLE
✓ ✗


+ \$100 -
ORANGE
✓ ✗


+ \$200 -
LEMON
✓ ✗

Session Feedback

So overall, how would you rate the event?

4.7/5

76% of respondents gave us 5 stars

"Incredible experience"

"It's engaging content and delightful to learn about the interface and intersection of art & science"

"...I haven't yet had the chance to travel and visit a Science Gallery space but would love to someday be able to do so. In full disclosure, I would also love to work there as well :)"

"I thought the content was engaging and the presentations were very well done — the tech was used smoothly and there were almost no tech glitches and the mix of presentation and discussion was really good"

"...it's a place where science is conveyed so beautifully"

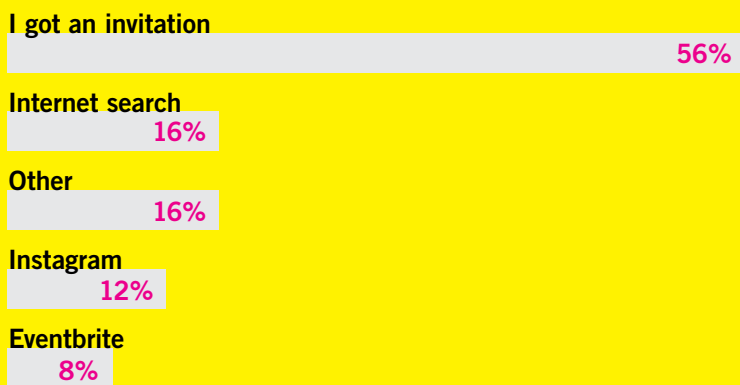
"The exhibitions are always so mind opening and have things that are unexpected/surprising."

"I'm overwhelmed by the thoughts and ideas of all the events took, for me it was a really different experience"

"Great effort, and organizing stuffs. Precisely planned in such a way covering wide aspects."

"Yess!!! Got along with a few people who shared the same interests and loved the whole experience!"

Would you mind telling us how you heard about the event?



What were your expectations of the event?

"Thought provoking"

"collaboration, ideas, creativity"

"I thought it was some long and boring presentations...It made me very happy to see I was wrong"

"Well I thought unlike other events this would be something like just sit and listen, but this was above my expectations really fun and I enjoyed interacting with people and made new friends"

"I do expect this event to be there again in future."

And would you be likely to visit a Science Gallery in-person (pending opening again post-covid restrictions)?

10/10

Extremely likely — 92%

Press and Media

Click to explore

The Wire

An Immersive Theatre Piece on
How Misuse of Citizens' Data
Creates Social Hierarchies

Northeast Now

Guwahati youngsters try immersive
theatre to highlight core issues

CLOT Magazine

Symposium: **BOREDOM**
REBELLION at Science Gallery

The New Indian Express

The Best out of Boredom

RTE Drivetime

On Boredom with Aisling
Murray and Ian Robertson



Ca' Foscari
University
of Venice



EMORY
UNIVERSITY



MICHIGAN STATE
UNIVERSITY



THE UNIVERSITY OF
MELBOURNE



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

**YOUTH
SYMPOSIUM
2021**