

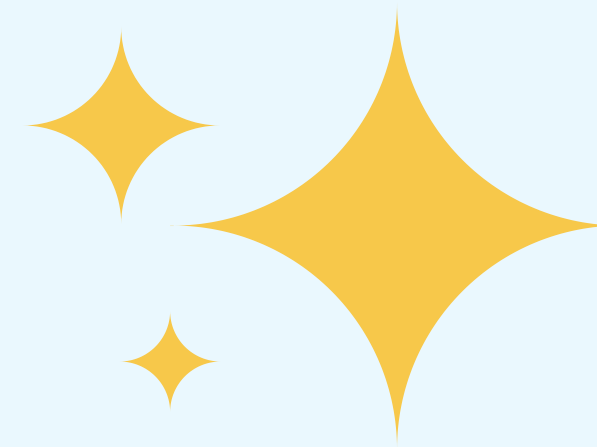


LGBTQ  
HISTORY  
MONTH

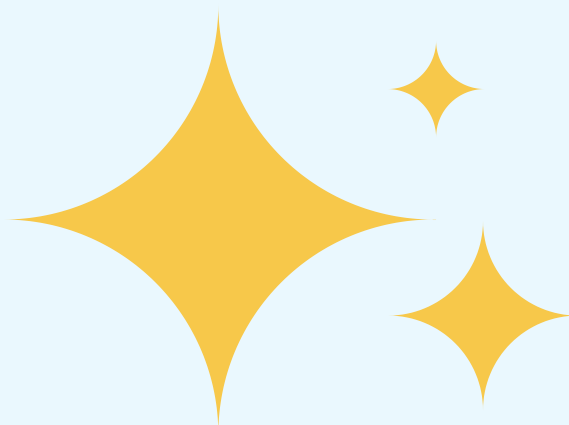
The image features a vibrant rainbow background with a purple, cloud-like border. The text 'LGBTQ HISTORY MONTH' is centered in a bold, pink, rounded font with a dark outline. There are several yellow starburst graphics scattered around the text, adding a celebratory feel.

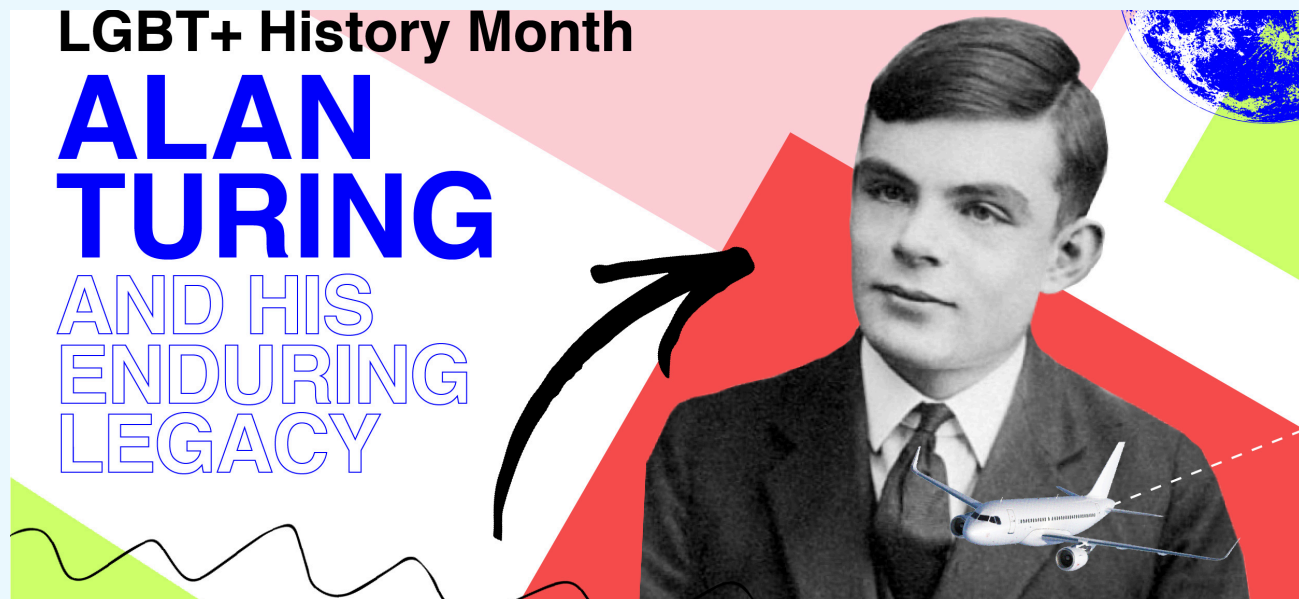


# INNOVATION AND SCIENCE

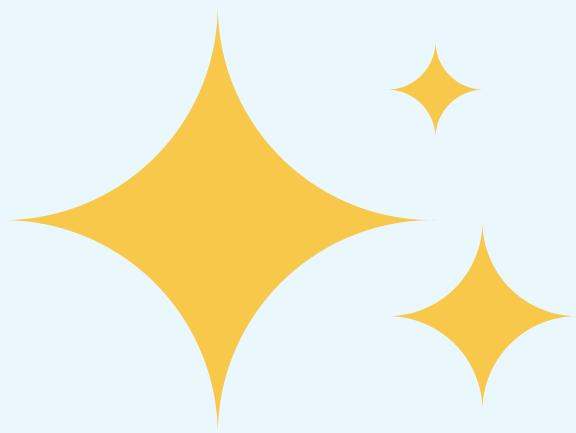
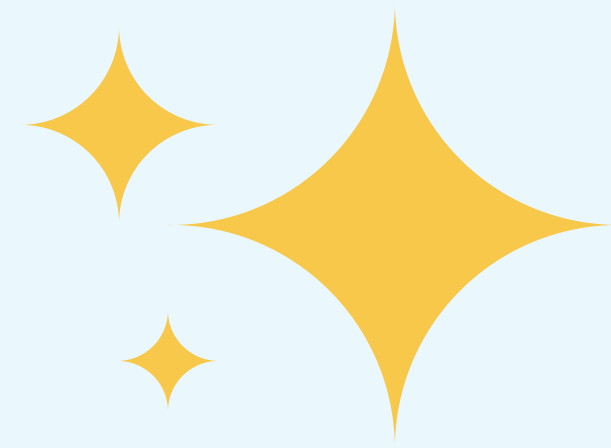


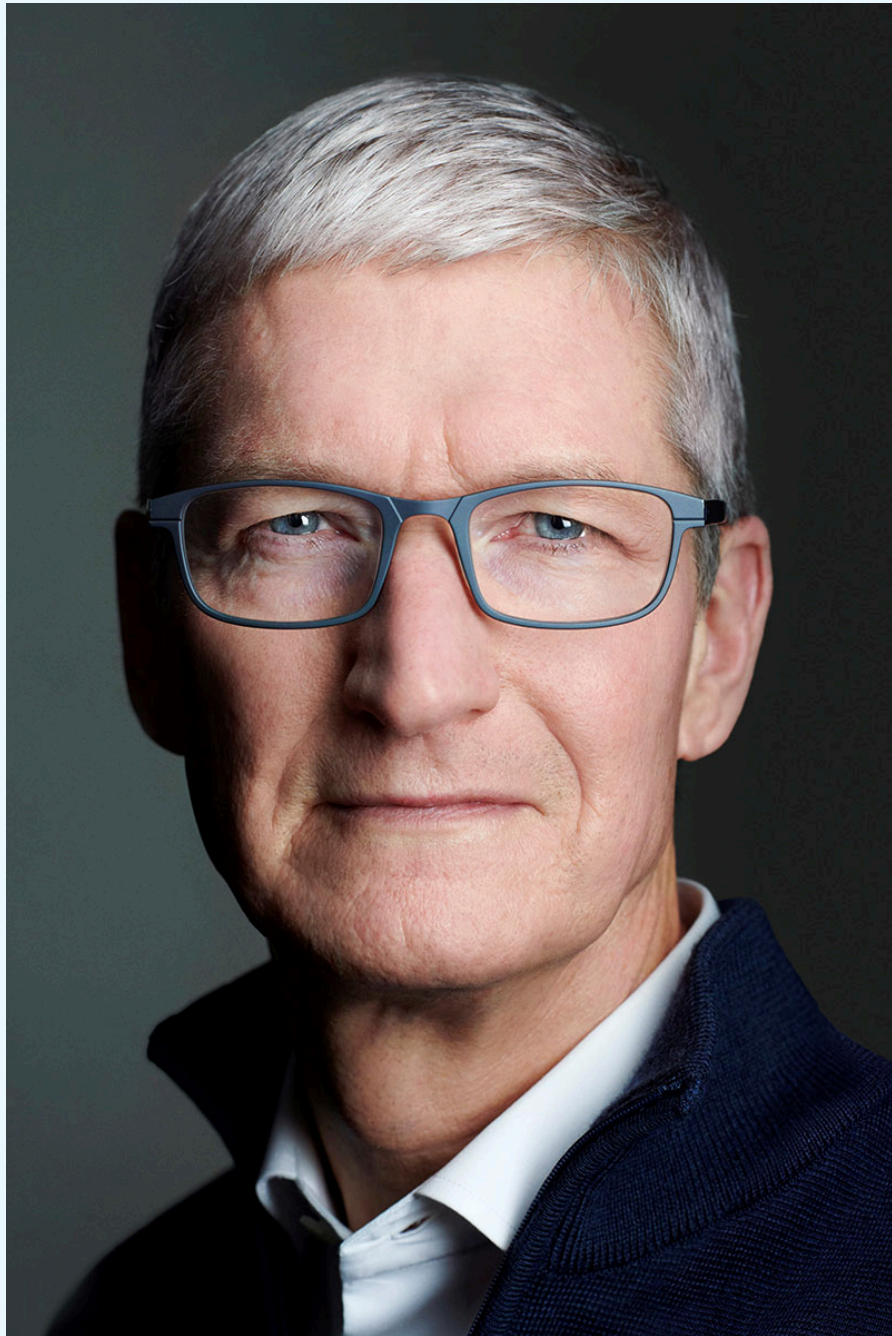
**PEOPLE WHO HAVE PLAYED A VERY CRUCIAL PART IN  
INNOVATION AND SCIENCE**



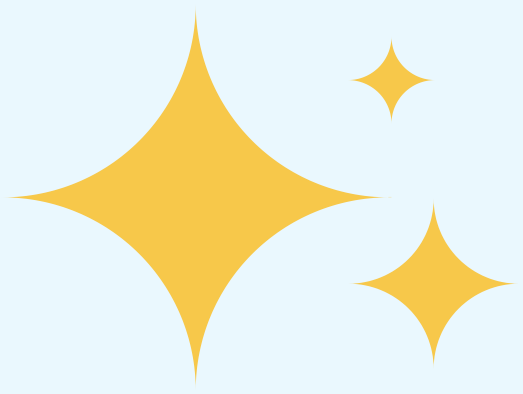
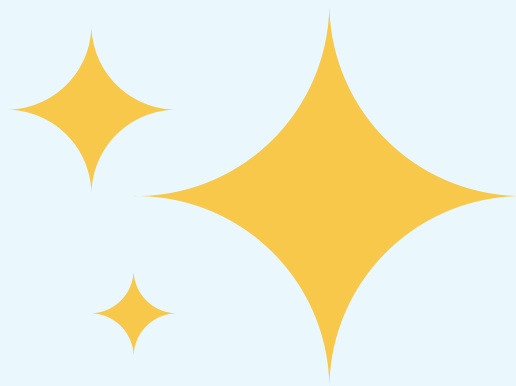


Alan Turing (he/him) – Alan Turing was a prominent British mathematician who was one of many at Bletchley Park to break the Enigma Code during World War Two, which is often credited to the British winning the war. Turing's invention of the Turing machine laid the groundworks for what is today the modern computer. Turing was a closeted homosexual and was prosecuted for it in the 1950s. Turing opted to take chemical castration instead of going to prison however later committed suicide. Turing's role as a homosexual has left a lasting impact on Britain with the pardoning of homosexuals being named Turing's law. (Science)



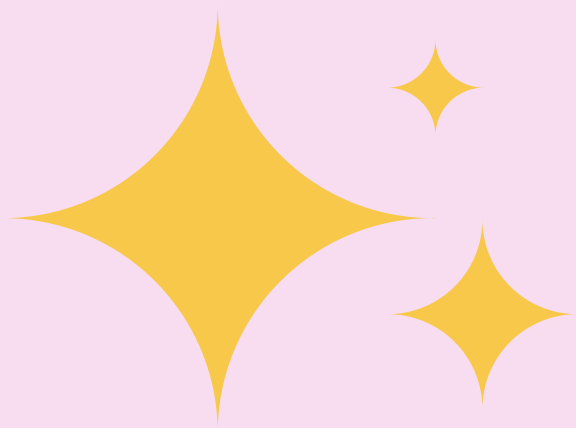
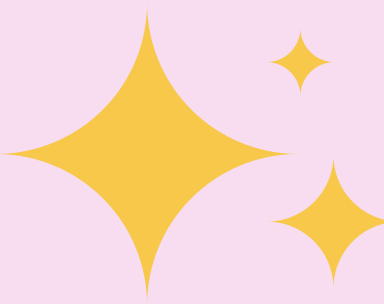


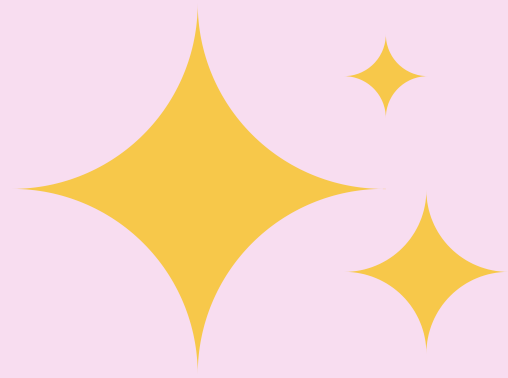
**TIM COOK (HE/HIM) - TIM COOK IS AN AMERICAN BUSINESSMAN AND OLIGARCH WHO HAS BEEN THE CEO OF APPLE SINCE 2011. COOK IS NOTABLE FOR HIS PART IN APPLE'S TECHNOLOGICAL ADVANCEMENT IN RECENT YEARS. COOK IS OPENLY GAY AND IS A VOCAL SUPPORTER FOR LGBTQ+ YOUTH. (INNOVATION)**



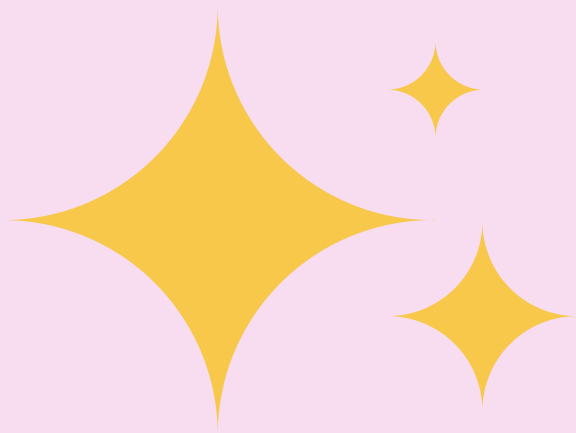


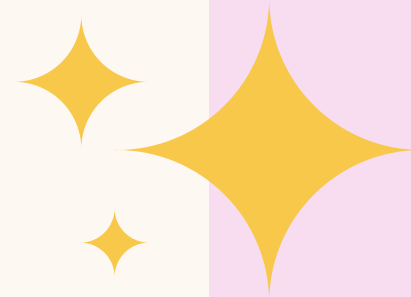
**Dr. Sally Ride (she/her) – Sally Ride was an American astronaut who was the first American woman in outer space. Ride was a Doctor of Physics and had a Master of Science degree. Ride worked on second and third Space Shuttle flights as a CapCom. Ride later became the first American woman in outer space, spending over 343 hours in space throughout her career. She is the first astronaut to be LGBTQ+, though this was not revealed until after her death.**





Angelica Ross (she/her) - Angelica Ross is an American innovator. She is the founder of TransTech Social Enterprises, an American company providing access to the tech industry for transgender people. She is self-taught in coding, graphic design and photography. Since the creation of TransTech, the company has greatly improved access to the tech industry for trans people. Ross has been outspoken in her support for LGBTQ+ rights and has spoken about her abuse in her conservative upbringing.



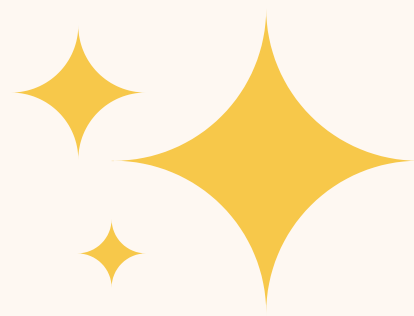


**Ben Barres was a neurobiologist, best known for his discovery that glial cells release factors that help make synaptic connections between nerve cells. He was assigned female at birth, but ‘internally [he] felt very strongly that [he] was a boy’. He was an exceptional student, but suffered in the face of sexism. When he once solved a difficult problem, it was assumed that a boyfriend had solved it for him, having been incapable of doing it as a woman. He found that he was treated with much more respect after transitioning, and became a lifelong advocate for gender equality.**

**“I lived life on my terms: I wanted to switch genders, and I did. I wanted to be a scientist, and I was. I wanted to study glia, and I did that too. I stood up for what I believed in and I like to think I made an impact, or at least opened the door for the impact to occur. I have zero regrets and I’m ready to die. I’ve truly had a great life.”**

**Extract from The Autobiography of a Transgender Scientist, Ben Barres, MIT Press 2018**

**He earned degrees from Massachusetts Institute of Technology, Dartmouth, and Harvard, and was the first openly transgender member elected to the American National Academy of Sciences, among numerous other honours. He died in 2017 from pancreatic cancer.**





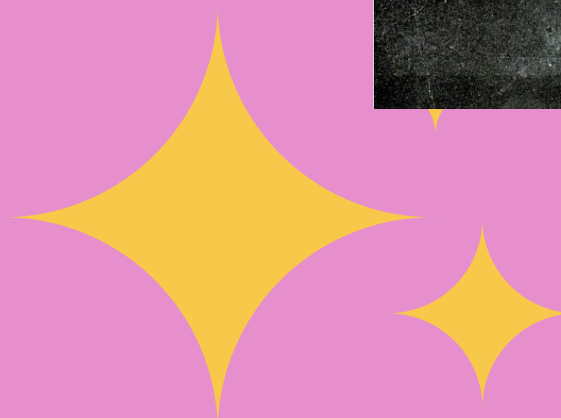
**MAGNUS HIRSCHFELD (1868–1935)**

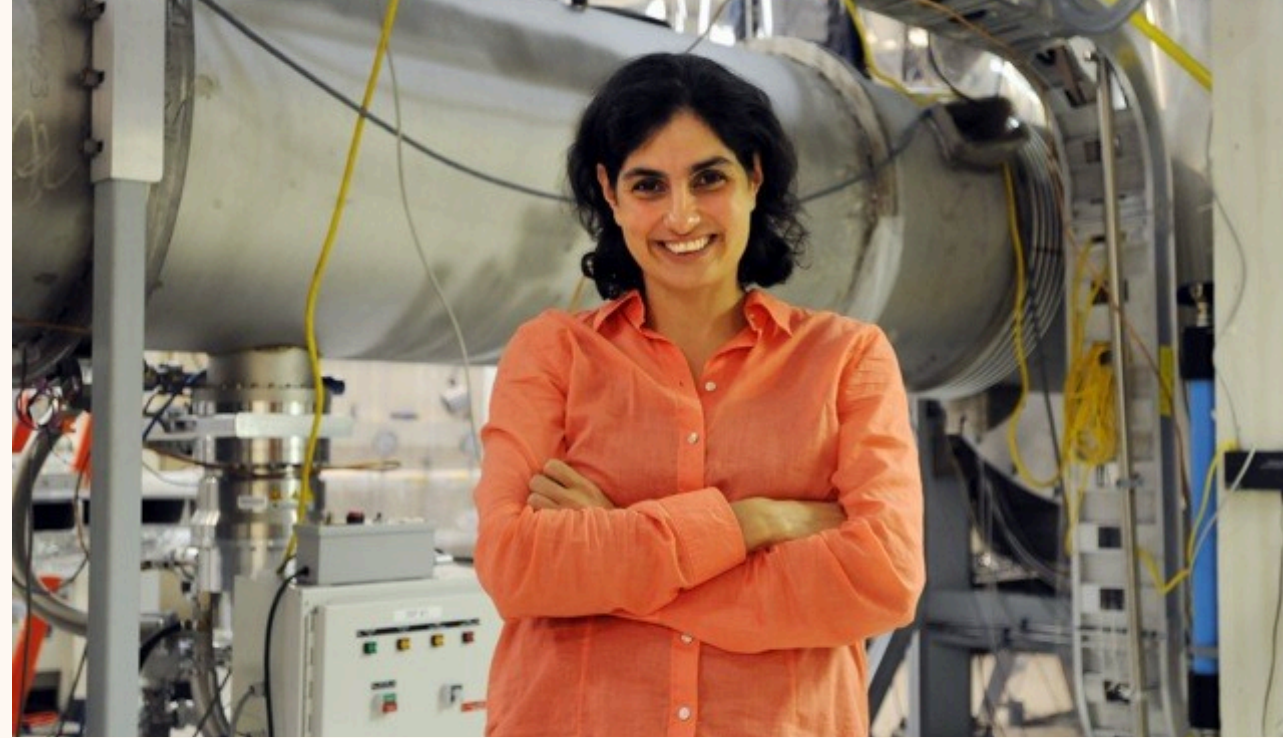
**SEXOLOGIST AND LGBTQ+ ACTIVIST**

**GERMAN SEXOLOGIST MAGNUS HIRSCHFELD LAID THE FOUNDATIONS FOR CONTEMPORARY UNDERSTANDINGS OF HUMAN SEXUALITY. HE ALSO LAUNCHED THE WORLD'S FIRST GAY RIGHTS ORGANISATION IN BERLIN, WHICH WOULD EVENTUALLY BRING HIM INTO CONFLICT WITH THE NAZI PARTY IN THE 1930S.**

**IN 1897, HIRSCHFELD ESTABLISHED THE SCIENTIFIC HUMANITARIAN COMMITTEE (SHC), WHICH CHALLENGED HOMOPHOBIC PREJUDICE, PROMOTED RESEARCH INTO SEX AND SEXUALITY AND LOBBIED FOR THE DECRIMINALISATION OF HOMOSEXUALITY. HIS CAMPAIGNING LED TO A DEBATE IN 1898 IN THE GERMAN PARLIAMENT ABOUT PARAGRAPH 175, A LAW THAT MADE HOMOSEXUALITY ILLEGAL (IT WAS NOT FULLY REVOKED UNTIL 1994).**

**HIRSCHFELD ALSO PIONEERED RESEARCH INTO SEX AND SEXUALITY AND WAS THE FIRST PERSON TO ORGANISE A SCIENTIFIC SURVEY OF QUEER PEOPLE. IN 1919, HE CREATED THE INSTITUTE FOR SEXUAL SCIENCE (ISS). THE ISS SAW OVER 20,000 PEOPLE EACH YEAR AND PROVIDED ADVICE FOR GAY AND TRANSGENDER PEOPLE, HORMONAL THERAPIES, COUNSELLING AND SEX REASSIGNMENT SURGERIES. LILI ELBE (BETTER KNOWN AS THE DANISH GIRL) WAS ONE OF HIRSCHFELD'S EARLY CLIENTS.**





**Nergis Mavalvala (1968-)**

**Astrophysicist**

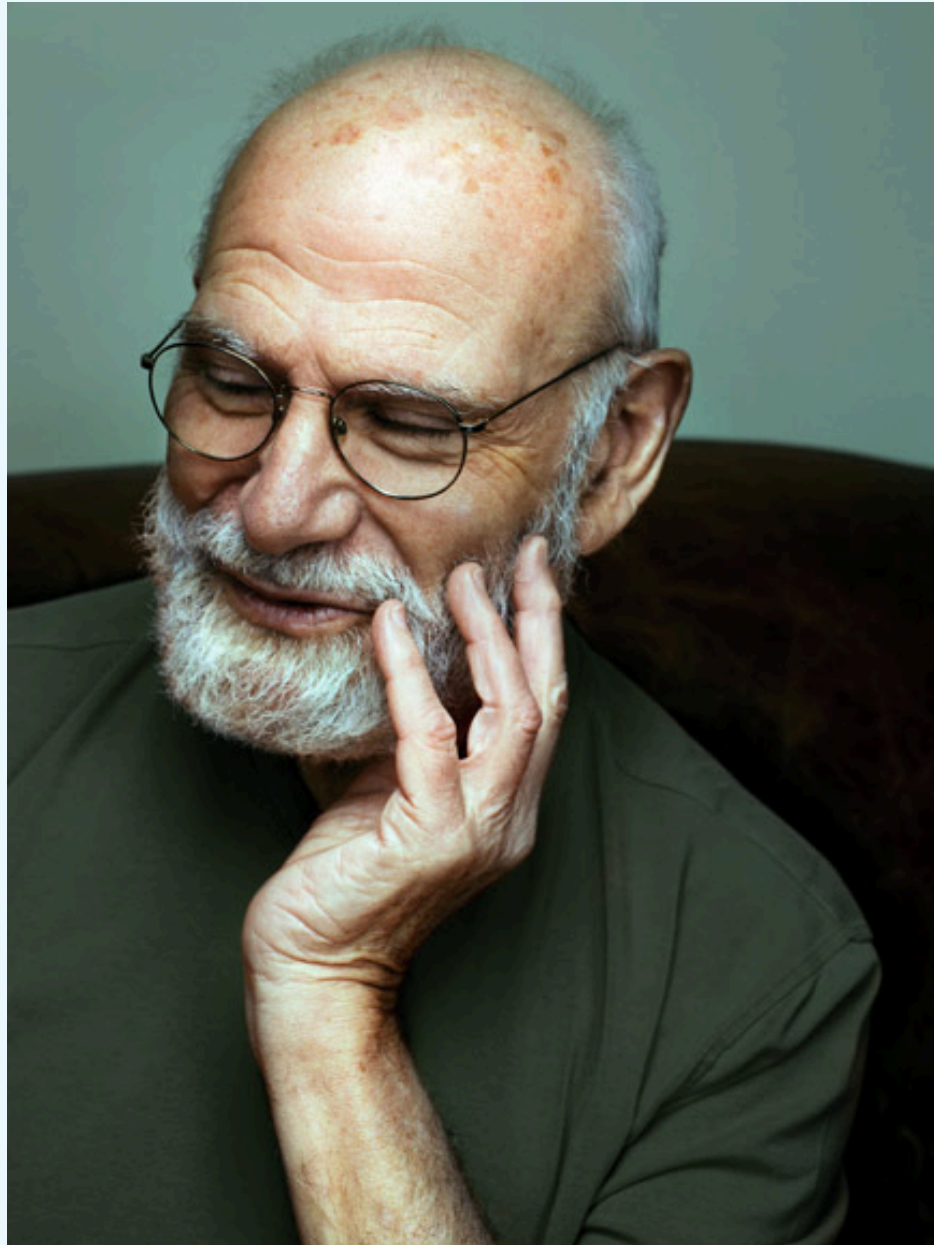
**In 2015, Nergis Mavalvala was among the team of scientists who first observed gravitational waves from the collision of two black holes. Gravitational waves – extremely faint ripples in space time – were a previously unproven phenomena, predicted by Einstein in his theory of general relativity. This momentous discovery is set to revolutionise the way we see and understand the universe, including the direct observation of dark matter.**

**Mavalvala was born in Lahore, Pakistan. After graduating from high school, she moved to the United States to study physics and astronomy at Wellesley College. She completed a doctorate in astrophysics at the Massachusetts Institute of Technology (MIT). She later joined the faculty at MIT in 2002 and was the first woman to be named Dean of Sciences there in 2020.**

**She is an openly gay Pakistani-American and describes herself as an “out, queer person of colour”. Mavalvala is a strong advocate LGBT people in STEM and challenges racial and social injustice within the sciences. Nergis Mavalvala was the recipient of a MacArthur genius award in 2010 and the 2014 LGBTQ Scientist of the Year.**

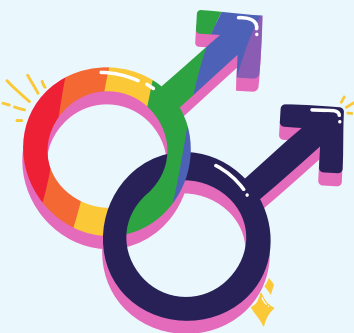


## Oliver Sacks



In an era of medicine when a paternalistic approach was the norm, neurologist Dr. Oliver Sacks infused his care with humanity, centering a dialogue that emphasized his patients' perspective and personhood. For most of his life, he encountered significant personal challenges, and struggled with prosopagnosia and an internal conflict with his sexuality.

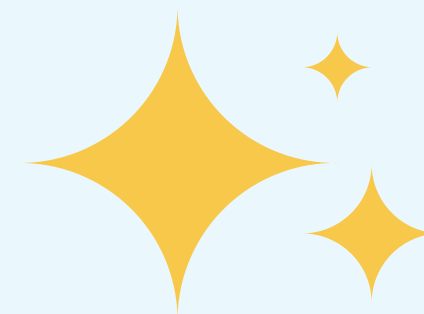
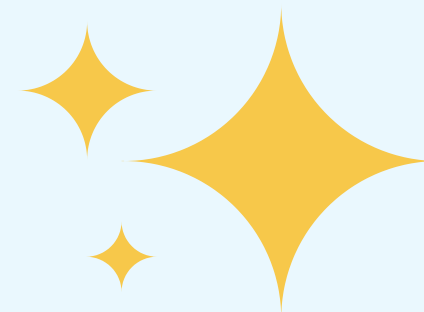
Instead of allowing these challenges to hold him back, he transformed them into the driving force behind a career that uniquely combined the scientific beauty of neurology and a humanistic patient-centered approach with the power of literature. Through non-fiction works like *Awakenings* and *The Man Who Mistook His Wife for a Hat*, he translated the overwhelming complexities of neurological disorders into stories that touched the hearts of readers around the world, making the science of the brain more accessible and human. In his later years, Dr. Sacks grappled with his mortality and the broader questions of aging and life's purpose, themes central to his final book, *Gratitude*. His reflections emphasized the importance of aligning healthcare with patients' personal values and goals. Dr. Sacks' legacy is marked not only by his professional contributions and literary achievements but also by his deep compassion and innovative approach to patient care, which continues to influence modern medical practice and inspire an ongoing discourse about the intersection of science, humanity, and individual experience.





## Sara Josephine Barker

Sara Josephine Barker was an American physician notable for making contributions to public health, especially in the immigrant communities of New York City. Her fight against the damage that widespread urban poverty and ignorance caused to children, especially newborns, is perhaps her most lasting legacy. She was very open about her sexuality and being a lesbian who lived with her partner, novelist Ida Alexa Ross Wylie, from 1920 until her death. She was a prominent feminist and member of the Heterodoxy club, openly challenging gender norms by wearing masculine-tailored suits and living independently.





## Audrey Tang

Audrey Tang is a Taiwanese software developer, and a transgender woman. In 2016 she was invited into the executive cabinet of the Taiwan government as a minister without portfolio, the youngest in Taiwanese history to do so at only 35 years old, and the first transgender member of the cabinet. Tang quickly took office as the first 'Digital Minister', managing and communicating information with the public digitally. She is a symbol of two of Taiwan's most important values: a transparent government and a liberal society.



# THANK YOU FOR LISTENING!

Don't hesitate to ask any questions!

