My name is Elizabeth Wynn, I'm the Equality and Diversity Manager at the Babraham Institute, and just before I get started with the talk I want to say happy International Men's Day. One of the aims of International Men's Day is to support queer and trans men so I think that this is a really appropriate talk to be giving today. And one of the other reasons I'm doing a talk on this subject is because yesterday was LGBTQ STEM Day.

So today I'm going to be talking about queer scientists through history. I'm going to be talking about a couple of specific scientists, and doctors as well, it's all under the umbrella of STEM, as well as some of the historical context of LGBTQ people, like attitudes toward them and rights. So these are some absolutely huge topics I've chosen for myself here and entire books have been written on some of the areas I'm going to touch on extremely quickly. So this is really going to be a brief introduction to some specific scientists and some historical context of it. And if you're interested in any of these people or ideas there's a lot more research, a lot more resources you can look at to go into much more depth.

So the first person – oh wait -- before I talk about any specific people, I want to talk about why is this important, why I've chosen to talk on this subject. I think we all know that it's really important and beneficial to have role models, to be able to recognise people you relate to in order to, you know, make achievements in certain areas. Role models are incredibly important. And for LGBT people because that can be very invisible sometimes, unlike being a woman or being of a marginalised ethnicity, being LGBTQ can be invisible so that means we need to make more of an effort to find and share those stories. And also throughout history, because this is definitely one's personal life so a lot of people haven't necessarily been open about their sexual orientation or gender identity and a lot of the time these types of histories have been actively suppressed, which makes it even harder to find queer role models. So I that's why I think it's really important to share these stories.

And another thing is specific to queer people as a marginalised group, because LGBTQ people sort of pop up a random throughout populations, there isn't -- it's harder to find an inbuilt community. For example, if you're from a marginalised ethnicity, like if you're Black, your family is normally going to be Black, you're going to have access to an inbuilt community like that, hopefully, and also your shared history. Whereas LGBT people need to find that with each other. And this is something that throughout history LGBT people have wanted to share with each other.

So I just have two quick examples there was a time capsule in San Francisco, which was buried in the 1870s and one of the books in it, The Great Geysers of California by Laura De Force Gordon, she wrote at the front of it, *"If this little book should see the light after its 100 years of entombment, I would like its readers to know that the author was a lover of her own sex and devoted the best years of her life in striving for the political equality and social and moral elevation of women."* 

Another example was letters written between Gordon Bowsher and Gilbert Bradley in the 1940s. Bradley was a soldier, they're both British, and wrote letters back to his sweetheart. And in one letter from Gordon to Gilbert, he wrote, "Wouldn't it be wonderful if all our letters could be published in the future in a more enlightened time. Then all the world could see how in love we are."

So this is a common thread, I think, that LGBT people have always wanted to be able to share their histories, so I'm glad that today I'm going to be able to talk about some LGBT folks with you.

The first person I'm going to talk about is James Barry. He was born roughly 1789, there are some doubt about his actual year birth which I'll go into a bit later, and died in 1865. He was an Irish surgeon and he qualified as a doctor in 1812 and joined the British Army and the following year.

He served in many parts of the British Empire. And what he really focused on was sanitation and nutritional reforms for troops, but also for local residents. He was by all accounts a very aggressive and confrontational person and frequently got sanctions and demotions for how aggressive he was in trying to promote these reforms. But also progressed through the army so clearly was doing his job well. One other thing he's known for is he performed one of the first recorded successful Caesarean sections outside of Europe.

Moving on to the LGBT part of his life: it took historians quite a bit to connect this, but he was named Margaret Ann Buckley at birth, and was known as female in childhood. That's one reason there was a lot of confusion over his birth date is because of his youthful appearance. When he tried to enroll in university as a man the university officials thought that he might actually be a prepubescent boy of around 14 whereas in reality he was probably about 20 when he tried to enter university. But he did enter university and became a doctor, as we said, and he lived for a man as the rest of his life.

Despite requesting that in the event of his death strict precautions should be adopted to prevent any examination of his person, the woman laying out the body described him as a 'perfect female'. She tried to blackmail the doctor who signed the death certificate, who was a personal friend of Barry's, and when she couldn't get any traction there she went public with it. So this became very well known, the fact that, you know, was picked up by a lot of newspapers at the time, the fact that Dr James Barry was in fact a woman. The doctor who signed the death certificate afterwards wrote, "it was none of my business whether Dr Barry was a male or a female, and I thought she might be neither, viz. an imperfectly developed man."

So this leads us to questions: how we interpret this in the modern sense in our modern European understanding of gender. Was James Barry what we would now describe as intersex, what at the time would have been called hermaphrodite? Was he a trans man who identified as a man and wanted to live that way because of internal sense of gender? Or was he someone who, in order to have opportunities to become a doctor to serve in the army, those opportunities were only available to him if he lived his life as a men?

Since this was so long ago and we can't ask him these questions ourselves and he would have had very different terms and concepts available to him. It's difficult, I mean, it's impossible for us to say how he understood himself. But this comes back to the idea of finding role models, of what's useful for us nowadays, to be able to see in the past examples of trans people.

So to speak briefly about trans people in history. Trans or transgender is defined as having a gender identity that is different from the gender that was assigned at birth. So our understanding of gender and gender roles has varied hugely across time and place, which makes it difficult to define is someone a trans individual or not in history.

Certainly since antiquity, there have been various terms for gender non-conforming or trans or third gender people. It seems that almost all cultures have recorded examples of people living in this way, living in gender variant ways. And so these type of people have always existed in some sense, even though our understanding of gender and gender roles now is very different from what it has been in different times and places.

Talking more recently, advances in the 20th century have made sex reassignment surgery and hormone treatment a possibility. So this was definitely after Barry's time but I think everyone is aware now that this is possible. And some of the first people who received, for example, sex

reassignment surgery and these sort of hormone treatments happened in the late 1800s/beginning of the 1900s. Well known people include Lili Elbe and Michael Dillon.

The next person I'm going to talk about is Sarah Josephine Baker. So she was an American physician who was born 1873 and lived until 1945. Her work focused on public health and preventative medicine, especially in babies and children. At the time she was a doctor, women/female doctors weren't allowed to work in hospitals, so she became a public health inspector and that's what spurred her interest in preventative medicine.

One thing she's famous for is she helped track down Typhoid Mary twice. So Typhoid Mary was Mary Mallon a cook who was an asymptomatic carrier of typhoid, and absolutely refuse to wash her hands and take preventative hygiene measures so transmitted typhoid to a great many people in her work as a cook.

Baker was asked to become a lecturer at New York University Medical School, but she refused to because she wasn't able to attend university there because they only accepted men. They tried to find a male lecturer who had the same expertise in, at the time, what was called child hygiene, which we would now recognise as children's medicine. But they couldn't find a man who had the same level of expertise. So they agreed to her condition and allowed her to begin a doctorate there and subsequently admitted other female students and she also became a lecturer there.

So in New York she joined a group called Heterodoxy which was a radical women's discussion group with many openly bisexual and lesbian members. In her later life, she spent most of her life with a partner, Ida Wylie. They live together. After her retirement, Baker ran their household and Wylie was an author who described herself as a 'woman-oriented woman'.

In 1935, they moved out of the city to upstate and another woman joined them, another doctor, Dr Louise Pearce, and three of them live together in a successful household, I suppose one could say, for 10 years until Baker's death. And Wylie and Pearce continued living together until they both died in 1959 and Wiley and Pearce are buried next to each other. So in this photo they're unveiling a bust of Baker and the woman on the left is Wiley, the woman in the middle is the dean of the university where it's set up and the woman on the right is Pearce.

So none of these three women identified openly as lesbians. But given their, given what we can see of from our perspective in history, the fact that they associated with radical women's group, the fact that they set up a household together, which, you know, even at the time was, at the time was very unorthodox, three women living together. It's certainly, it feels safe to say that these were probably very intimate relationships certainly, very likely romantic and sexual. So Baker is often described as a lesbian.

[Oops. Okay, I seem to be missing a slide. We'll probably come across it later.]

Just to talk briefly about the history of women's same-sex sexual attraction. There's much less writing on it than there is about male same-sex sexual and romantic relationships. It's, I think, quite well-known little anecdote that in British law there, it was never illegal for women to have same sex relationships because the lawmakers didn't want to give women ideas or that they didn't believe it existed. So whether or not that is the case, certainly there's less writing about lesbianism, though there's less writing about women in general throughout history, so perhaps that is part of it.

Less writing about women in general and the practice of women's intimate friendships was something which happened a lot in sort of Victorian times onward because women were encouraged to, well, they couldn't have friendships, friendly relationships with men so they were encouraged to have friendly relationships, to have close relationships with other women of their social standing. So that is, that was probably a good cover for a lot of lesbian or bisexual women, women who were attracted to other women.

We've already had a spoiler for the next person but moving on to Alan Turing, of course probably one of the most famous LGBTQ scientists. I'm sure everyone knows about this, but just to quickly go over: he was born in 1912 and passed away in 1954. He was an English mathematician, computer scientist and codebreaker. He was elected a Fellow King's College in 1935 which was one year after he'd completed his bachelor's degree. From a very early age, he was recognised as a genius, as being incredibly intellectually adept.

During World War Two, he worked at Bletchley Park and played a pivotal role cracking the Enigma code. After the war, a lot of his work was on early computers and one of his most well-known legacies is the Turing Test for artificial intelligence and the theoretical work he did on artificial intelligence.

Currently, his personal life is almost as well-known as his as his public life, but at the time it was kept very quiet because of his close associations with government work. So, even after World War Two, he continued to do code like cryptography work with the government. So he was prosecuted for gross indecency in 1952. He had, he was in a relationship with a man. If you saw the Imitation Game, they suggested in that that he was prosecuted for work with a sex worker, but actually it was someone he was in a relationship with.

He was given the option of prison or probation with the condition that he undergo chemical castration so he was injected with a synthetic oestrogen, so he chose the probation, and he was injected with a synthetic oestrogen which reduced his libido. In fact, it made him completely impotent and also resulted in some feminisation of his body.

He died in 1954 from cyanide poisoning. At the time it was ruled a suicide, but actually more recently there has been the suggestion that it might actually have been an accidental overdose, accidental inhalation of cyanide because he had, because of some machinery he had in his in his living place.

So after some very public campaigns Alan Turing was granted a posthumous pardon in 2013. Some people pointed out how this was really quite unbalanced, unfair to pardon Alan Turing, but not all the other people who had been convicted of gross indecency. So in 2017 again as a result of a lot of public campaigning the Alan Turing Law, so called, was passed, and it granted a pardon to over 75,000 people who had previously been convicted of gross indecency under old laws.

And Alan Turing is going to be on the new 50 pound note which should enter circulation at the end of next year.

Looking briefly at homosexuality in the UK, and especially in the first half of the 20th century.

Homosexuality, homosexual acts have been illegal, were illegal in the UK from 1533, but the relevant bit of law that Alan Turing was convicted under was the Criminal Law Amendment Act of 1885 which made any male homosexual acts illegal whether or not a witness was present. Previously, it needed to have been witnessed.

During the 1920s and 30s, despite being illegal gay subcultures flourished among social and intellectual elites. The Bloomsbury set is a very good example of this and the whole bright young things. There was a lot of openly tolerated same-sex relationships.

But then post World War Two, there was a sharp increase in prosecutions for homosexual acts. This seems to have coincided, I'm not an expert on this, but it seems to have coincided in the United States as well. There was prosecution of homosexuals and communists, especially in government, governmental departments.

Anyway, so huge increase in prosecutions for homosexual acts, including several high profile cases, and this led to public backlash. The Wolfenden Report was commissioned in 1954 and published in 1957 and it recommended that homosexuality was decriminalised. And actions from this word later taken in 1967 that's when the law change to make homosexuality completely decriminalised. Even though it was decriminalised, it wasn't, obviously, that didn't end prejudice at all against gay people and more recently, I'm sure everyone is aware of other rights that LGBT people have gained in the UK. For example, the right to same sex marriage.

So I think this, looking at this brief little period of law and attitude in the UK is a good example of the types of swings and trends that have happened regarding attitudes towards homosexuality. There have definitely been times which are much more permissive followed by times which were more conservative. So again, after the Wolfenden Report, if you think about the 60s and 70s and free love and that sort of thing, again, that was a sort of booming time for acceptance of homosexuality and then in the 80s, the AIDS crisis led to a much more conservative time and much more prejudice. So this type of, you know, you think of Oscar Wilde, who was prosecuted in 1895 - less tolerance, 20s and 30s, a lot of tolerance, this sort of pattern is common.

So I've talked about people who there was strong evidence that they were LGBTQ+ scientists or doctors. There are a lot of other people that various historians have speculated were LGBTQ+, but as I said at the beginning, you know, this is about people's private lives, it's not something that a lot of people were open about we don't have a lot of evidence one way or another and certainly we don't have anyone who anyone on this list, who publicly described themselves as LGBTQ, but possible scientists that possibly were LGBTQ+, and if you search any of these names and that keyword you'll come up with this sort of evidence that I'm talking, that I'm referencing. So Francis Bacon, Florence Nightingale, George Washington Carver, Leonardo da Vinci, Isaac Newton and Margaret Mead are all scientists who people have speculated might have been queer.

One final thing I want to address is that I think it's very obvious that this, the people I've talked about, it's been a very white list. George Washington Carver, you might recognise, he's a well-known figure in America, and he is Black, but apart from that everyone I've mentioned has been white.

I did make an effort to look for people of other ethnicities. But the thing is, searching for historical LGBTQ+ scientist and searching for historical scientists who aren't white, there's a real paucity of information on both of those. So when you're trying to find the overlap, I really couldn't find anything. That's not to say they didn't exist. It's to say that in the resources I had access to, ones that were English language and Eurocentric I couldn't find anyone.

So I just finally wanted to highlight some BME LGBTQ+ scientists who are alive and working today. And if you want to find many more examples, go to 500 Queer Scientists for people sharing their own stories.

That's everything I wanted to cover today. Are there any questions or does anyone have any comments?