

Radiolab Podcast: Race

- At the White House – the moment race died.
- Celebrate completion of survey of entire human genome. For 100 years scientists had been trying to prove that race is real – not just what we see with our eyes but something very different.
- Blood, musculature, size of heads, nothing.
- Then – 2000 Bill Clinton introduced two of most important scientists. They’ve searched all the way down to DNA. The concept of race has no genetic or scientific basis. Modern science has proven the most important fact of life on earth is Common Humanity.
- But.... Down the road.
- Begin to notice subtle differences based on people’s health and race. Some genetic diseases target ethnic or racial groups more than others. Even some of the same scientists now believe differently.
- In 2000 standing with Bill Clinton – wanted to ask him about what he wrote in a medical journal a few years later.
 - Reading: Increasing scientific evidence... it is not strictly true that race or ethnicity has no biological connection. (Not the world’s best sentence construction.)
 - I think there are two points to make about race
 - We are really very much alike.
 - Even the difference turns out to be revealing.
- The show today – what exists to be said about Race?
- It is not strictly speaking true that race has no biological connection. (Grammar instructor – take this double negative and make it into a sentence that’s proper – it is sort of true that race has something to do with biology.)
- Some people are now taking that concept and running with it. A detective in Louisiana – Kip the Captain. In 2002 he used “race” to catch a serial killer.
 - The victim was left in a field and discovered by hunters. Vehicle abandoned right near her mother’s grave site.
 - The 4 victims’ deaths were linked by DNA Evidence. Dubbed the killer the Baton Rouge Killer.
 - Based on witness info, the suspected killer is a white male in a white truck. Eye witness report, serial killer and most SK are white guys. Police taking DNA samples from almost 1000 men.
 - They asked the crime lab for anything in DNA profile indicating race. Initially, there was no info – no markers.
 - Another company was looking into phenotypes from DNA – genetic tests that can be like an eye witness. Will be able to tell you characteristics like eye hair skin colour. This DNA was tested and came back as being 90% likely it was a black male.
 - They caught a man who was convicted for two of the murders.
 - More complicated than finding a Race Gene.

- DNA Print – will send you a kit. You can discover your unique genetic ancestry.
- Jad taking his DNA Test. Swab inside your cheek with it. Send it through the mail and you'll get info back.
 - Items of evidence come, get run through machines.
 - What are they looking at to indicate race? Billions of DNA letters, letters, letters.
 - If you recited the DNA code, one letter per second, it would take a Century to read out one person's DNA Code. We'd be identical for 17 minutes before there's be any difference between us.
 - Every difference has a story behind it. We all started in the same place together.
 - Evidence is good thinking we had our origins in Africa with as few as 10 000 people. After that humans started to span out across the globe.
 - These people are having babies and in the process the DNA is copied over and over but sometimes the copying isn't perfect. Sometimes you'll find a copying error. C-C, A-A, T-T, C-A no!
 - Imagine an error occurred in Asia – the baby was one letter different. One thousand years down the road, the same error is there.
 - It's like a genetic souvenir.
 - They've identified about 180 little differences – that people who share ancestry share this.
 - Leave lab – to office. Determine it is of alien origin. Ha ha.
 - That sample was determined to be What do you think it's going to be? His folks are Arab – if he had to guess probably some European on dad's side.
 - The test will not tell you countries.
 - So his Sub Saharan African ancestry – zero percent.
 - Native American ancestry – 1%
 - East Asian 5%
 - European 94%
 - His definition of European includes Middle East.
 - Looked at people with Jad's exact similar database, he brought up people with blonde hair and blue eyes. They looked like white folks to most people. (Polish)
 - The tester doesn't know that Jad is a dark haired dark skinned guy. Lebanese
 - Big difference between Lebanese vs. Polish.
 - He can directly read in DNA what the eye colour is.
 - Then he can compare the results to others with those percentages to get an idea of what potentially the subject looks like. (For example, for police then they would have a range of potential looks for a subject.)
 - Never been called a "racist". How have you escaped that?
 - Are people critical of what they do? Yes. A lot of scientists have a knee-jerk reaction thinking general masses won't be able to handle this information. People may be a lot smarter than what we give them credit for being.

16 mins

- There is a tendency when this subject comes up people will “shh shh” not want to talk about Race.
 - Science complicates things. Even the definition of science about Race being about “ancestry” doesn’t jive with how people Live race.
 - Look at the photo – what race do you think he is?
 - He’s Black. Definitely Black.
 - How Black do you think he is?
 - He’s Black Black.
 - Like Obama Black?
 - I don’t know! He’s blacker than that.
- Man speaks – Grew up in segregated South. Growing up parents taught you were either Black or you were White. He write essays about Race for national magazines.
 - Happened to see a tv program talking about racial testing on DNA. Thought it would be perfect for his essay so he wanted to test himself to see what percentage he was Black. Thought it would be 75% or more African. Sent away for the kit and a few weeks later got back the results.
 - Checked the kit number first, thinking it was a mistake. He couldn’t believe it.
 - 57% Indo-European
 - 39% Native American
 - 4% Asian
 - 0% African
 - Had lived 50 years as a Black man and had no genetic link to being African.
 - Went and talked to his mother – said he loved her and wanted the truth that he was adopted. She laughed. He said it doesn’t make any sense. His mother thought she was too old to change the way she lived. His brother rejected the results and continued to believe he was a Black man.
 - His wife’s response was troubled – she didn’t understand that he couldn’t be Black. She had defied her mother to marry a Black man. She needed him to be Black.
 - You start thinking about your life. There are certain decisions about your life you make based on your idea of your race – would he have married a Black woman in his first marriage? Would he have attended a Black high school? Maybe not. How different would his life have been if he’d have known it forty five years ago?
- Music plays from 21:50 – 23:00
- Today’s program is about Race
- Learned scientists don’t mean Race – they mean the features your ancestors acquired.
- Forget Lab scientists – if you are a doctor and it’s your job to save lives, you can’t help notice there are differences.
- Story about a drug called Vidal. It loosens up the arteries.
 - As a white man about to talk about race on the radio, you have to loosen up.

21 mins

- Dr. Kohn professor. Stalky, white beard, wearied / grave doctor look. Spent career looking after heart problems.
- In early 70s the breakthrough – first patient, bead ridden, can't move, fluid in lungs. Gave him a combination of two drugs – the patient suddenly said he could breathe again for the first time in months.
- Confirms drug – long term study for 5 years.
- FDA said no to the patent. Denied approval because it wasn't a big study – only 86 people got the drug. He went back to what he was doing before the drug to try to figure what was going on with heart problems. People were just starting to look at racial differences.
 - That Black people suffered more heart problems than whites.
 - The debate was going on out there.
 - They broke the data up by race, which hadn't been considered before. He wanted to go back into his database to see if Black people would respond differently to the drug.
 - They gathered the data and when they looked at the numbers, they saw a bump. In that trial, the Black patients did significantly better. He published it and a company wanted to do a trial and only use Black people. They could do a smaller study and it would be cheaper and only market to Blacks.
 - The study found 43% reduction in mortality. Chance of dying from heart failure for Black people on the drug was cut in half.
 - FDA approved it as the first racialized drug. After 100s of years looking for differences between White and Black people and mapping the DNA genome project, it's been found a distinct difference.
 - What should they do now?
 - They had a symposium – mainly aimed at attacking the Dr with people who disagreed Race was a scientific category. She said she would be terrified about a DR making a diagnosis like that based on their view of her belonging to a particular racial category.
 - If you went to a Drs office and were anemic, they would automatically check you for Sickle Cell Anemia – a natural reaction for a Black patient. The statistical likelihood of a White patient having Sickle Cell Anemia is so low you wouldn't waste your time with that test first off.
 - We can look at a patient and help identify some processes of diagnosis to be more precise in diagnosing. But this woman believed these racial biases impede (slow) medical diagnosing.
 - She's asking "do you know what you think you know".
 - Example: when you go to the dr and they put that blood pressure thing on your bicep, it's widely known that Black people have higher blood pressure. (It's well known.) It can seem like it's caused by Race. Black Americans suffer twice as much as White Americans. Make the argument that this is not an innate (genetic) difference.

34 mins

- The best argument here is Richard Coopers – Dr and researcher. He went to poor neighborhoods in Chicago (went door to door and took blood samples) and then compared to other countries (Canada, Spain, Italy, UK, Germany)
 - Huge 8 nation sample with 85 000 samples, to find who has the highest rate of blood pressure and does it have anything to do with race. At the end, the nation with the highest hyper tension is Germany. Finland Poland and Russia are even worse. The nation with the lowest hypertension is Nigeria. (Big difference)
 - If you're a dr and just focused on USA data, you would assume it's about race.
 - What does cause the difference – if it's not race what is it? Diet?
 - What about Vidal – if you are the first drug ever to be approved for Black people wouldn't you want to know your drug works better for Black people. They only ever tested it in Black people and didn't test it with White people.
 - It's FDA approved only for Blacks – in the end Vidal tanked. It was opposed because of the concept of it being for Blacks – it wasn't as widely used as it should be.
- In our regular life we get excited about racial differences when we look at sports.
 - We found a Jamaican – Canadian Jamaican English – and talked to him about his early days as a runner.
 - Go to track meets and reggae music playing and stands are full of Jamaicans. Dealing with the fact that there just aren't any White people in lanes 1-8.
 - There was a guy who dominated the quarter mile – he was a White guy. They all thought it would never last. They thought he wouldn't make it because he wasn't Jamaican.
 - There was an unspoken prejudice that said if you weren't Jamaican it was hopeless.