

A DAYTIME TALK TV CHAT SHOW SET. SOFA, COFFEE TABLE, VASE OF FLOWERS, GENE MACHINE (COVERED). HOST AND SCIENTIST ARE PREPARING TO GO LIVE. HOST IS STANDING AT THE SOFA, CHECKING MAKEUP AND HAIR, WHICH REQUIRES MORE CONCENTRATION THAN TALKING TO THE SCIENTIST. HOST IS STRESSED AND SNAPPY AT FIRST, BUT BECOMES RELAXED AND HAPPY WHEN ON AIR, BRIMMING WITH CONFIDENCE. SCIENTIST IS NERVOUS, BUT EXCITED.

Host Come on you guys; 2 minutes is all!! Are these flowers for real? Move that boom, its right in my eye line, and has anybody seen my next guest?!!

Chris Hello, I am Dr Chris Taylor...

Host Great, (INDICATING SOFA) you sit at that end. You know who I am of course. Have you done much TV?

Chris No, this is my first time, actually I'm feeling a bit...

Host Great, it's a doddle. You'll love it. Did you bring the gizmo?

Chris Yes its here, shall I get it out?

Host We have a saying in TV; don't tell me, show me. Better make it quick, we've got 2 minutes for the break then we're back with you as first item. What do you call that thing?

Chris Oh, the Microarray and Microassay Hyper Channel Optimising Genetic Analysis with Real Time Interpretive Functionality Unit.

Host OK... the Gene Machine and what does it do?

Chris I take a sample of DNA, insert it in here and the Microarray and...

Host Gene Machine.

Chris ...and the Gene Machine analyses it and prints out a complete genetic profile.

Host Profile. That's good, kind of distinctive, like a fingerprint. "The finger of genetic proof", no, "The finger of Genetic Truth". Which do you prefer?

Chris Actually, I prefer the microarray and ...

Host Did you see Jerry has a lie detector on his show? Hah, we got genetic profiles – how cool is that?

Chris It's not a toy.

Host Is a lie detector a toy? This is reality, not a game show. "Reality Bites on Top TV Show". Genes come in bites, right?

Chris That's computers.

Host One minute left – how does it work?

Chris Your body is made up of lots and lots of tiny little cells – millions of them. There's a nucleus in the middle of each one. And each nucleus contains 46 chromosomes.

Host So what happened to the genes?

Chris A chromosome is like a string of genes. Altogether, you have about 30,000 genes in each cell.

Host And with millions of cells, that's like (CALCULATES) billions of genes. What do they all do?

Chris Actually, it's the same 30,000 in each cell.

Host I knew that

Chris These genes play a vital role in making us who we are, things like hair colour, height, aspects of personality all have some genetic basis.

Host So if we've all got these genes that control everything, how do we end up so different?

Chris There are many, many different versions of genes out there and we all inherit different combinations from our parents. Only identical twins have the same genes.

Host Is that why they always dress the same?

Chris When they get the choice they don't. Identical twins may seem similar; but actually, there are lots of differences between them.

Host So how does that happen?

Chris Our genes are only part of the story, what happens to us in our lives also makes a difference to us.

Host Kind of "Inheritance vs. Circumstance", no, how about "Biology vs. Experience"?

Chris It's usually called "Nature vs. Nurture".

Host Hey, that's good – are you looking for a job?

Chris I have one.

Host And we have the Gene Machine. "The answer lies in the Genes", no "The Genes are Out There", better, "The Truth is in Here". This is great. So, where do you get the DNA?

Chris That's the easy part; I just take a swab with this cotton bud.

Host "The Cotton Bud of Destiny". Go for it.

Chris What?

Host Fifteen seconds, grab the DNA.

Chris From you?

Host Who else? This is my show.

Chris I need you to sign a consent form.

Host I don't sign anything without a lawyer.

Chris Are you sure about this?

Host Didn't I say so?

Chris Well...

Host Five seconds.

SCIENTIST TAKES A SWAB

Host Places everyone! (TO SCIENTIST) Do something with that hair.

MUSICAL STING. WE ARE LIVE. HOST TURNS CASUALLY FROM CHRIS DELIGHTED TO SEE THE AUDIENCE BACK FOR MORE. CHRIS IS FLUSTERED AND ADJUSTING HAIR.

Host Welcome back; so good to see you all again. Now, stop what you're doing; sit down and pay attention, because we are about to make televisual history. Ladies and Gentlemen, please Meet the Gene Machine.... (LEADS THE APPLAUSE)

APPLAUSE

Host And with me today is Dr Chris Taylor...

Chris Hello.

Host Chris, we are all just so excited about having you and the Gene Machine here with us today.

Chris (STILL HOLDING THE COTTON BUD) it's great to be here.

Host Now Chris and his friends have invented a fantastic new device that can read all your genes.

Chris Yes, It's called the microarray...

Host The Gene Machine, that's right Chris. Now as I understand it Chris, we all have millions of cells in our bodies and each one has a nucleus containing about 30 thousand genes arranged on strings called chromosomes.

Chris (IMPRESSED) Yes that's spot on.

Host And these genes are inherited from our parents?

Chris Yes, we actually have two full sets of genes, one from each parent. One from the sperm and one from the egg.

Host OK OK, keep it clean Prof, this is a family show. Now, these genes can tell us a lot of things, can't they?

Chris Yes, our genes determine many things about us, many of our key characteristics.

Host So the Gene Machine can tell us much more than, for instance, a lie detector?

Chris Oh yes, a lie detector will only tell you if somebody is lying.

Host Whereas we will know the truth.

Chris (SEES DISASTER LOOMING) The output from the machine is true, yes. But it can only tell us about a person's genes....

Host You bet. In fact, this will change the whole future of reality television. With this new machine we can get closer to the truth than ever before.

Chris Errm, it's not just for television.

Host (WORRIED) Oh? Who else has a Gene Machine?

Chris Well, medicine obviously.

Host Really?

Chris Yes, many common diseases have genetic components, spotting those genes will mean doctors can treat people more effectively.

Host Isn't that great!

Chris Obviously the police and others would like to use the machine to assist in identifying people...

Host But the biggest impact will be here on TV. And guess who will be the very first celebrity to Meet the Gene Machine...

Chris You?

Host (LAUGHS) as we like to say in television “Here’s one I prepared earlier.” (INDICATES MACHINE)

Chris Oh yes, we did. I have it here.

OPERATES MACHINE

Host What does it say?

Chris (HOLDING PRINTOUT) Well first off, it confirms that that is your natural hair colour, and will be until you are in your 50s. However long that may be.

Host Does it tell you my age?

Chris No, your genes stay more or less the same all through your life.

Host So I have the genes of a teenager? (CHUCKLE)

Chris Even chromosomes get old.

Host (MOVING ON) What else can you see there?

Chris Ah, you have a number of gene variants associated with being musical.

Host I knew it!! I always said I had talent. My mum said I was too lazy to have lessons.

Chris You have some versions of some genes that are associated with musical ability. But, yes, hard work and practice are still very important.

Host I could have been a superstar – wait a minute, I AM.

Chris (TRIES TO ENJOY THE JOKE)

Host Let’s get serious for a moment. Last week we brought onto the show Annie McNally, the Three Timing Granny.

Chris Who?

Host You know, the old lady who’s been knocking off three generations of the same family...

CHRIS HAS NO IDEA

Host Anyway, nobody can figure out how she looks so young, no wrinkles anywhere – and believe me, we looked. But with the Gene Machine here we would know that kind of stuff, right?

Chris Perhaps she uses a lot of skin cream.

Host Wow!! Is there a gene for that?

Chris No, but environment is a major factor in our lives.

Host OK, so what else have you got there?

Chris Well, it says here that you are likely to be quite tall.

Host (BECOMING IMPATIENT) I can see that for myself; let me have a look.

TAKES THE PRINTOUT

Host What's this?

Chris That says that you produce a lot of red blood cells.

Host So?

Chris So you should have high levels of fitness and stamina.

Host OK. Tell me something I don't know. What's this?

Chris Oh, that's quite common.

Host So what does it do?

Chris We can talk about that after the show.

Host I'm happy to share this with my public.

Sci That says you carry the gene variant that causes Cystic Fibrosis.

Host Now you're wrong there, I'm as fit as a fiddle, you just said so.

Chris No, it's not like that. I said earlier that genes come in different varieties, and some varieties cause harm. If you had inherited this variety from each parent, then you would have the disease.

Host So I'm OK?

Chris Yes, but you could pass the gene on to your own children, and the disease too if your partner also has this version of the gene.

Host How would I know?

Chris Ask her/him to use the machine.

Host Oh boy, his/her lawyers are gonna love you. OK, what does this one mean?

Chris Ah, now that's a really interesting gene.

Host Uh huh.

Chris Well, its pretty technical. You might want to talk to a few people about that...

Host You don't think my audience is stupid I hope?

Chris No no no, it's just...

Host Yes?

Chris (DEEP BREATH) That gene suggests you have a predisposition towards breast cancer.

Host What's a predisposition?

Chris Well, it doesn't mean you will get the disease, but you might.

Host Anybody might.

Chris Yes, but you are at greater risk.

Host How much greater?

Chris That would be hard to say.

Host So what's the point in telling me? It's in my genes, so there's nothing I can do

Chris There are lots of things you can do to reduce the risk; diet, exercise, self examination. How often do you examine your breasts?

Host (NO LONGER HAVING FUN) You Scientists really are quite blunt aren't you? We've got time for one more result before the break. How about this one?

Chris That one?

Host Yeah.

Chris (INDICATES ANOTHER) This one's interesting.

Host That one.

Chris It's sort of private.

Host I have nothing to hide.

Chris Are you sure?

Host It's a disclosure show – get disclosing.

Chris You are at very high risk of alcohol dependence.

Host What is that supposed to mean?

Chris Alcohol dependence is a condition in which a person...

Host (STANDS UP) I know what an alcoholic is.

Chris Yes, I daresay.

Host Oh, do you daresay?

Chris (STANDING UP)) Look, you asked me to tell you.

Host Are you trying to ruin my reputation?

Chris Of course not, in fact I tried to warn you about revealing this information in public.

Host You didn't tell me it would be like this. This is terrible.

Chris The information in our genes is very powerful, and valuable.

Host Yes, to blackmailers and paparazzi.

Chris No, to all of us

Host You want to do this to everyone?

Chris Of course not, but we can't keep this information locked away forever. Gene testing is here to stay.

Host People have a right to privacy!

Chris People have a right to know!

Host To know how much? To know about who? who decides?

Host The great British Public of course, but do you have the nerve to ask them what they think?

Chris Yes, I do.