

Armchair Adventures: A Join-in Story Podcast For Kids

A Record-Breaking Vaccination Adventure!

Connie: Welcome to the Armchair Adventures Travel Agency, journeys of the imagination. I'm Head Travel Agent and Host, Connie!

Music: Armchair Adventures theme

Connie: Good morning, good afternoon or Guten Abend wherever you're listening from adventurers! And a big hello to all our adventurers on YOTO. Thanks for listening! The voices of today's join in at home Adventurers are...

Adventurers: Redgate Primary School

Connie: Hi Everyone!

You too can star in an episode of Armchair Adventures as one of our special guest adventurers. All you need to do is ask your grown up if you can join the Armchair Adventures Fanclub on Patreon. Simply head to [patreon.com](https://www.patreon.com) and search 'Armchair Adventures' for more info.

Music: Armchair Adventures theme fades out

Scene 1

Connie: Hello Adventurers, I promised my Uncle Chris we'd try and break a world record today, only I don't really have...

Unc. Chris: (Eating) What about eating 150 Jaffa cakes in 3 minutes?

SFX packets opening and Uncle Chris eating

Connie: Each?! That's quite a lot! And I just came to tell you...

Unc. Chris: Hmm ok I better put these down then... what about 100 star jumps in 60 seconds! Time me!

SFX exercise music and Uncle Chris star jumping

Connie: Uncle Chris, I won't manage that either! And I just came here to tell you...

Unc. Chris: Fine! How's your burping? Let's try out for worlds loudest belch! Are you with me adventurers! Could you do a record-breaking burp?

SFX Ding

Adventurer: I've been practicing for this my whole life!

Adventurer: I'd take gold in the burp-lympics that's for sure!

Adventurer: Pass the fizzy pop and I'm ready to go!

Connie: No, stop everyone! No record-breaking burps! I'm really sorry Uncle Chris, but I've just been trying to tell you I can't break a record today...

Unc. Chris: That's a pause on the burps Adventurers! How come Connie, what's happened?

Connie: Well, I forgot all about this test on vaccination that I've got tomorrow so I really need to study for it! I've no idea how they work!

Unc. Chris: Oh, so you're learning about the injections we have that help to stop us getting ill?

Connie: Yes, and what happens inside your body when you have one.

Unc. Chris: Well, not to worry, my Friend Dr Rachel, who we met in a prehistoric portal adventure, just happens to be working on some new vaccines at the moment.

Why don't we get your lovely customers on the line and pay her a visit? She's always working on brand new stuff so I bet we could break a record or two while we're there as well!

Connie: Great idea uncle Chris, because on an Armchair Adventure we can go anywhere we like from the comfort of where we are right now, so they're perfect for everyone, no matter what age you are. Start. Call. Now.

SFX phone ringing

Hi everyone!

Customers say hello

Linda: Where are we off on an adventure today, Connie?

Connie: We're going to visit Dr Rachel to learn all about vaccinations and what they do inside our bodies!

Uncle Chris: And try and break a world record...

Hazel: Ooh, sounds fun!

Ada: Oh, I remember having one to stop me getting polio, they put a little pink dot on a sugar cube, you had to eat it!

Steve: We had to have loads of different injections to protect us from getting sick when I was in the Airforce.

Hazel: I even had to have injections before I went on holiday.

Pauline: I know they help to stop you catching illnesses, but I've no idea how they do it inside our bodies.

Customers all agree

Unc. Chris: Then let's go on an armchair adventure to Rachel's super-secret lab on the double. A journey of the imagination here we come!

Customers cheering

Music: Armchair Adventures theme

Scene 2

SFX laboratory sounds, beeping and blooping, liquid moving in tubes. A sci-fi atmosphere.

Cyril: We're here! Wow it's so cool, look at all these fancy machines.

Nina: It's bright white and very clean.

Steve: There's tonnes of tv screens and little robots too.

SFX Sound of a robot whizzing past.

Linda: Not to mention, test tubes all over the place

Connie: It's like being inside a movie, set in the future! What can you see in the super-secret lab adventures?

SFX Ding

Adventurer: There are suits with big helmets hanging up.

Adventurer: Needles with colourful liquids inside.

Adventurer: Lots of beeping and booping noises.

Adventurer: Beakers with skull signs on them.

Unc. Chris: There's bound to be something record breaking in here! Ooh what are those nasty looking things inside those big glass tubes?

SFX Bubbling from within the big glass tubes.

Hazel: I don't know.

Pauline: But they look a bit frightening...

Steve: Like horrible little sleeping monsters...

Unc. Chris: Hello in there!

SFX knocking on glass followed by horrible monster sounds and them banging on the glass.

Customers frightened by them

Donald: (sounding like he's coming through a screen, loud) You want to be careful with those!

Customers frightened again!

Linda: Arggh who said that?

Donald: Up here on the big screen. My name's Dr Donald Palmer, I'm a professor in immunology, which means I do lots of work about the immune system. That's something that happens in our bodies, to help us when we get ill.

Rachel: He's helping me work on some new vaccines. But he's in his own lab at the moment that's why I have him on the big screen. I was just coming to see what all this noise was about...I should have known it was you causing trouble Uncle Chris!

Unc. Chris: Sorry Rachel! I'm here with my niece Connie and her customers to learn about vaccines and what happens inside our bodies when we have them. I was wondering if you could help us?

Connie: Nice to meet you Rachel. Yes, I've got a big test on them tomorrow...

Unc. Chris: And we're also trying to break a world record, so if you have any world firsts on the go...

Rachel: Well, we are actually working on something brand new to help fight off those germs you just met...

Ada: Oh, is that what they are! But they're so big...

Donald: That's because they are in super magnifying tubes, so we can get a good look at them...

Rachel: The spotty one having a good itch is measles.

SFX Knocking on glass

Rachel: Say hello measles.

SFX Itching sound

Measles: When I get out of here, I'll make you all itch... mwahahaha!

Donald: The one that looks like a big balloon is mumps.

Connie: You look very bumpy mumps.

Mumps: That's right...and if you mess with me I'll make you bumpy too...

Rachel: The big rash floating around is Rubella, how are you doing in there, Rubella?

Rubella: Ew, don't look at me...

Cyril: Charming.

Donald: And the sneezer is Covid...

SFX A few sneezes

Unc. Chris: Those germs have super scary voices. Can you pretend to be horrible germ adventurer?

SFX Ding

Adventurer: Nerrrrghh I'm spiky- don't mess with me!

Adventurer: Get ready to feel sick...

Adventurer: Raghhhh! I'm super strong, watch out!

Connie: So, what's new about the vaccine you're working on Rachel?

Rachel: Well normally you would have a vaccination by an injection in your arm but we're creating one that you sniff with your nose.

Hazel: Wow, that sounds like a great idea!

Linda: And what's in a vaccine that makes it work against the germs?

Donald: Well, vaccines work by letting our immune system practice fighting the germs without us having to get sick. To do this, some use a weak version of the real germ, that we say is deactivated and sometimes they use a piece of the germ, that we call a sub-unit.

Connie: I'm learning already, this is great!

Rachel: Come into our research room and meet my colleague Dr Pallavi. She's going to try out our new nose vaccine for Covid. Follow me, it's just through these automatic doors.

Donald: Don't forget to change my video feed onto your watch Rachel, so I can join you too!

Rachel: Will do!

SFX Digital bleep as Rachel switches Donald's video feed to her watch.

Pauline: Ooh what a fancy watch.

SFX Swish of lab door and more science atmosphere SFX

Pallavi: Hello everyone, I'm Dr Pallavi, welcome to my lab! There are lots of experimental machines in here so please don't touch anything, so we all stay safe!

Customers all agree

Great! So, would you like to come and have a look at the new vaccine I'm trying today?

Customers "yes please"

Pallavi: Pass around these magnificent magnifying goggles and just look on this table, you will see the vaccine in super close-up!

Connie: Oh cool, let me try...

SFX Putting on the goggles, robotic hiss and movement.

Wow, there are like, little spikes floating around in some liquid, is that the piece of virus?

Donald: That's right Connie, they're just the part of the germ that makes us sick, for our bodies to respond to.

Connie: Do you want to try Uncle Chris?

Unc. Chris: Oh I'll wait my turn Connie, let all your customers have a go!

Customers – ooh and ahh, having a go with the goggles

Wow! There are so many cool inventions in here, there's bound to be something that could help me break a world record!

SFX Uncle Chris' footsteps as he walks around the lab looking around.

There's robot suits, watches that do video calls, amazing! I could be first human to run on the spot as a robot on a watch call! Now, how do I release the robot suit...Ooh maybe this red button?

I know Pallavi said not to touch anything but I'm sure it will be ok...Well only one way to find out!

SFX button press

SFX Uncle Chris shrinks and has a squeaky voice effect on his lines, returning to normal when inside the body.

Oh no, I don't think that was it...something's happening, I'm shrinking, I'm becoming absolutely tiny! Oh no it's a shrink ray! (reading) trial shirk ray- lasts one hour - ONE HOUR, that's too long to be this small, I could get stepped on! Oh, why did I press it, better shout the gang to help. Connie, Rachel, anyone? Help I've gone tiny!

Customers – still ooh and ah, having a good time

It's no use adventurers! They can't hear my little voice. Can you take a big breath and blow me up onto the table? They might be able to see me with those goggles then!

SFX Ding

Adventurer: Come on everyone, let's take a deep breath!

Adventurer: *blowing sounds*

SFX breeze sound to underscore UC until he lands

Unc. Chris: Wahhhhoooooo! Thanks adventurers I'm flying through the air! Almost there, wait oh noooo, I'm going to land in the vaccine!! Arrrghh.

SFX descent and a splat

Oh, it's really sticky! Gross. Phew Rachel has the goggles, great! Look down here, help!! Woah, hold on a mo, I'm moving, eek!

SFX sloshing and moving

Rachel: Ok Pallavi, I'll lift this up, then just take one big sniff to take the vaccine into your nose. Then we can tell Connie all about what happens next!

SFX Big sniff

Hold on what's that on the vaccine, is that Uncle Chris *in* the vaccine!? He's just been sniffed into Pallavi!

SFX dun dun dun

Pallavi: He must have pressed the experimental shrink button!

Rachel: But that only lasts for an hour, we need to get him out, and fast!

Connie: What are we going to do? How will we get him out? He can't go back to normal size inside Pallavi's immune system!?

Customers worried

Donald: There's only one thing for it, you will have to shrink down and jump inside the MMR vaccine injection and go after him! MMR stands for measles mumps and rubella, the nasties you saw earlier.

Pallavi: Good idea I was going to have that injection today too.

Rachel: You will both create an immune response and hopefully end up in the same place as him.

Steve: But what if we need help when we are inside Pallavi?

Donald: Keep me on the video watch, that way I can talk you through anything you need to know.

Pauline: Great idea

Pallavi: You better set a reminder that will countdown how long you have left before you grow again too.

Pauline: On it! One hour reminder started.

SFX Watch alarm sound, robot voice 60 minutes remaining

Rachel: Ok everyone, stand under the shrink ray, it's time to get small!

SFX button press followed by wavy sound

Customers shrinking

Connie: You too adventurers

SFX Ding

Adventurer: Woooooah I'm shrinking

Adventurer: I always wanted to live like an ant

Adventurer: Tiny adventure, here we go!

Pallavi: Now jump into the liquid vaccine inside this syringe!

Customers diving in

SFX plops of customers entering the vaccine.

Connie: You too adventurers!

SFX Ding

Adventurer: Watch out for my splash!

Adventurer: Time for a pool party

Adventurer: Let's go, can't wait

Adventurers: Woohoo!

Donald: All ok in there?

SFX Sloshing

Connie: Affirmative! Watch is working.

Linda: Hang about...I'm not sure if I'm ok..

Ada: Look over there...

Pauline: We're not alone!

Hazel: Measles, mumps and rubella are here too!

SFX dun dun dun

Customers in terror

Donald: Calm down everyone, they're deactivated versions remember and not the nasties you met earlier! It means they can't hurt you...

Mumps: Yeah, we are like totally chill man...

Rubella: No need to worry about us, for realsies.

Measles: We're nothing like our horrid, wild siblings dude.

Connie: Phew, nice to meet you!

Mumps: Back at ya man, I'm so laid back, I can't wait to help out Pallavi's immune system.

MMR – Right on dude, etc.

Donald: Speaking of which, what better way to learn what happens when you have a vaccine than seeing it firsthand!

Pallavi: Just please get out in time! I don't think there's room for you all in my immune system when you grow back to normal size.

Customers: message received, we are on it, we won't let you down etc.

Pallavi: Ok good luck team, it's injection time...

SFX injection

promo swap

Connie: While we make our way inside Pallavi, let's pause our journey of the imagination, and hear about another podcast I think you might like.

Ad plays

Connie: Now let's get back to our journey of the imagination and find out what it's like inside the human body!

promo swap ends

Scene 3

SFX inside the human body, squelchy sounds, heart beat in the distance

Connie: Wow, we're here inside the human body how exciting!

Cyril: The floor is very squishy

Steve: That's not the floor, it's Pallavi's muscle
Nina: Oooh yeah.
Connie: So why do we get injected into the muscle, Donald?
Donald: We inject into muscles because there are lots of cells in there that help with our body's immune response...
Rachel: Cells are what all of our bodies are made of, but you'd only be able to see them if you looked at them under a microscope.
Connie: Woah, how lucky to see them up close then!

Customers agree

Donald: Speaking of which... here's one now.

SFX Intruder Alarm

SFX Sticky rolling sounds of the cell

Ada: What? that big round pink ball rolling towards us?
Hazel: It's covered in suckers
Steve: With a big flashing light on its head!
Measles: Oh, cool man a welcome party!
Donald: That's a dendritic cell, it's a type of white blood cell that gather up intruders they don't recognise and take them to the lymph node. A lymph node is small bean shaped pouch, sometimes you can feel them in your neck. It's inside these that the body can learn ways to fight them off. And do you know, there's over 800 of them in the body!
Rachel: Wait, it's not stopping...
Pauline: It's rolling on to us...
Cyril: Ughhh it's so sticky!

SFX slime squelching sounds

Steve: I'm getting stuck to its suckers

SFX sucker sounds

Connie: Pretend to get stuck on the dendritic cell with us adventurers!

SFX Ding

Adventurer: Urrrgh it's like an octopus!

Adventurer: It feels horrible!

Adventurer: Personal space please

Donald: Don't worry everyone that's just how they collect you up for the next part of the immune system journey.

Customers rolling and stuck

Linda: Roll on the sticky cell with us adventurers.

SFX Ding

Adventurer: Wahhhh it's really fast.

Adventurer: I hope these suckers hold.

Adventurer: I feel sick.

Adventurer: I think it's quite relaxing actually..

Rachel: Well, this is exciting! If a little sticky...

Connie: It's like rolling around in a gross zorb! But I'm learning a lot! First the deactivated virus enters the body and is picked up by the dendritic cell and taken to the lymph node!

Hazel: I wonder how Uncle Chris is getting on...

SFX rolling transitions into surfing music and the sound of waves

Unc. Chris: Woohoo! The nose makes such a good place to surf. Who thought these pieces of virus would make such good surf boards too, not to mention the waves this snot makes! Next stop, the tonsils! Pull up a sub-unit surfboard and ride through the nose with me adventurers!

SFX Ding

Adventurer: I've always wanted to be a surf star!

Adventurer: Snot's no match for my skills

Adventurer: Urghh! This is gross! But also, fun! Woo-hoo!

Unc. Chris: Keep steady as we go down into the mouth, adventurers! Make sure you land on the tongue! You don't want to fall down the throat, that's a one-way ticket to the stomach! Woooooah...

SFX Ding

Adventurer: It's hard to stay in control

Adventurer: The nose hair is tickling me!

Adventurer: Look out, mouth below!

SFX landing on the tongue with a bounce

Unc. Chris: Phew, we're here... the tongue is so squishy.

SFX squishy feet

And the teeth look really scary when you're the size of a rice grain! I'll be staying away from them!

SFX gnashing teeth

What can you see in the mouth as a tiny adventurer?

SFX Ding

Adventurer: The breathing is really loud in here!

Adventurer: The tongue is like a big flat snake.

Adventurer: When she swallows it's like a bouncy castle, woohoo!

Adventurer: It's so pink, just like my bedroom.

Unc. Chris: Right then adventurers, where to next I wonder?

Tonsils: YOUUUU SHALL NOT PASS!

Unc. Chris: Ooof that's a loud voice! Who said that?

T1: Us

T2: The tonsil twins!

T1: You can wonder where to go all you like but you aren't going anywhere

T2: We're the tonsils and we trap little invaders like you and your little piece of virus...

T1/T2: And call in the troops to neutralize ya! Pow, pow, pow!

Unc. Chris: Woah, woah, woah... I'm only here by accident! Can't you tell me where to drop off this bit of virus and I'll happily be on my way!

T1: No can do I'm afraid, we're the door guards to Pallavi's body here and you're not on the list mate!

T2: Our job is to remember who you are and what weapon we make to kill you...

T1: He's talking about an antibody mate, it's what your immune system makes to fight off nasty intruders...

T1/T2: Like you!

T1: Then we get it delivered, and you're done for. Simple.

Unc. Chris: If you could just let me, explain...

T2: HmMMMM now, let's think, what are you?
T1: HmMMM yes, what are you-hoo?
T1/T2: HmMMMMMMMMMMMMMMMMM!
Unc. Chris: Listen, this is getting out of hand, I'm a person who shrank down by accident... so why don't you take this virus and spit me out or something? Hello?
T2: HmMMMM, no it's no good!
T1: Never met you pair before.
T2: This is a job for the dendritic cells!
T1: Alarm!

SFX intruder alarm from earlier

Unc. Chris: Dendritic-wats-it now?

SFX rolling sticky sounds

Do you mean that big pink ball covered in suckers, heading this way?
Is that a flashing light on its head?!

T1: Yep! That cell is gonna capture you and take you to the lymph node, or as we like to say...

T1/T2: Prison!

Unc. Chris: Sorry, I think there has been some misunderstanding...Wait, don't roll over me... urrggh I'm stuck!

SFX sticky rolling sounds

Connie: Uncle Chris! Is that you?
Unc. Chris: Oh wow! Connie? Have you come to save me? Wait...how did you get in here?
Rachel: We shrank down to find you and hitched a ride with the MMR vaccine.
M/M/R: Hey man, totally chill to meet you etc.
Unc. Chris: What a relief! But this shrink ray only lasts an hour!
Customers: We know!
Connie: Now we have found you, we need to get out of here...
Rachel: We can't still be inside Pallavi when we grow back to normal size...
Unc. Chris: Absolutely not! That is not the record-breaking I had in mind when we started this adventure...

SFX Rolling sounds coming to a stop.

Rachel: It looks like we've arrived everyone... this lymph node really does look like a jail...

Scene 5

SFX scanning sounds and lots of creature like chattering sounds

Steve: Oh, this place is creepy

Cyril: And what are all these tiny t-shaped creatures?

Linda: They're standing all around us so we can't move!

Pauline: Are those scanners on their heads?

Nina: Are they going to scan us?

Cyril: Oh no!

Donald: Those creatures are actually T-cells, they scan invaders like our vaccines. Then they use that information to help their mates the B cells, build a weapon, called an antibody, to fight it off should the real version of the germ invade.

Rubella: Like our awful siblings dude.

Unc. Chris: Ohhhh, this is what the tonsils were telling me!

Connie: But will it hurt when they scan us?!

Measles: Calm down everybody...

Mumps: Chill out and let them make some memories.

SFX T Cell voice with a light robotic effect on it

T cell: Preparing to scan invaders...hold still...

Rachel: Will it take long do you think? Surely, they will realise we are people and let us go?

Connie: Yes, we don't have a lot of time until we grow back to normal size

SFX Watch alarm sound – "30 minutes remaining"

Donald: Thirty minutes...

Pauline: Oh dear...

Steve: T cells please hurry!

T cell: Scanning in T minus 5, 4, 3...

Connie: How will we ever sort out this mess adventurers... At least we found my Uncle Chris! Join us next time to find out what happens after we get scanned by the T cells! Until then - over and out...

Music: Armchair Adventures theme

Blueprint: This episode was funded through NHS England North West and the British Society for Immunology and produced in collaboration with Redgate Primary School and Alder Hey Children's Hospital.

With special thanks to Doctors Rachel Isba, Pallavi Patel, Donald palmer and the pupils at Redgate Primary School.

The views expressed in this episode are those of the author(s) and not necessarily those of NHS England or the Department of Health.