

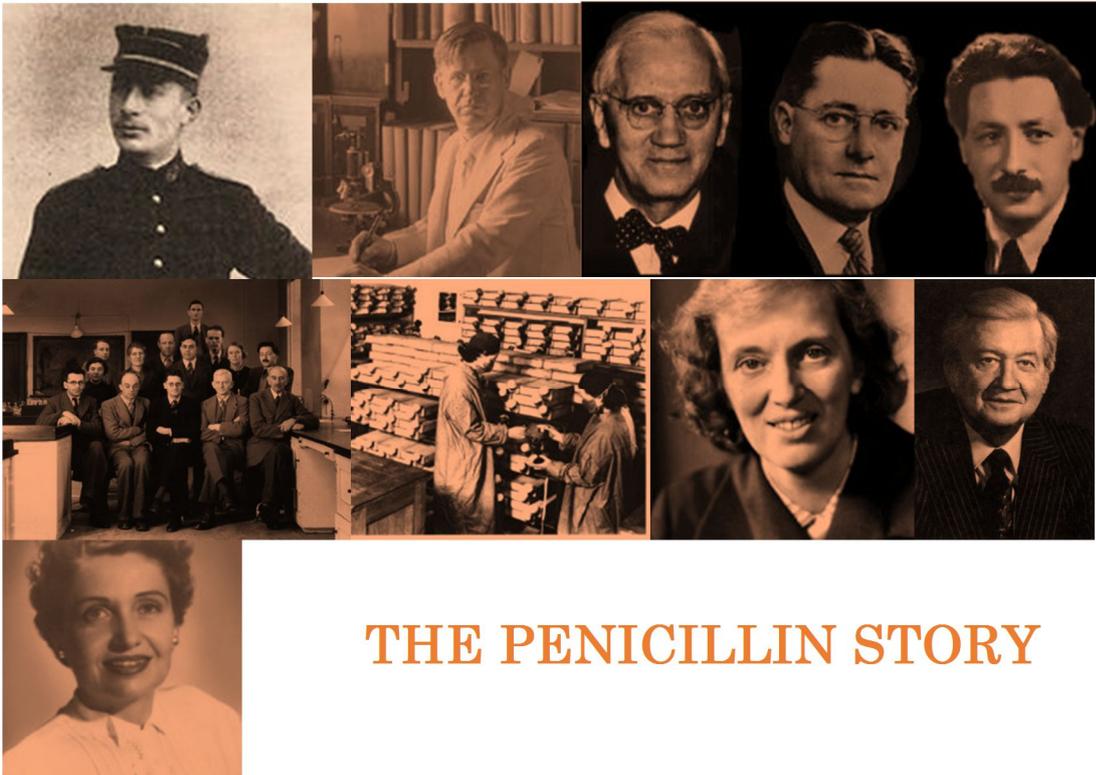
Playstage

Junior

www.schoolplaysandpantos.com



PEOPLE WHO SHAPED OUR WORLD



THE PENICILLIN STORY

Written by
Roger
Hodge



PEOPLE WHO SHAPED OUR WORLD

THE PENICILLIN STORY

THE CAST

The Class

MR FITZ:	Teacher (Fizzy, to his class)
MISS SMITH:	Teacher – moderate and child friendly
PETER:	The practical one
GEORGE:	The geek – mentally active
SALLY:	The pacifier – a friend to all
JESS:	The feminist
MARY:	The motherly type

Characters.

Ernest Duchesne	The Penicillin girls (6)
Sir Alexander Fleming	Emma B.
C.J. La Touche	
Student	
Cecil George Paine	
Mr A. B. Nutt	
Arthur Gardner	
Howard Florey	
Ernst Chain	
Norman Heatley	
Edward Abraham	
Jena Orr-Ewing	
Margaret Jennings	

27 speaking parts. Running time approximately 30 minutes.

PEOPLE WHO SHAPED OUR WORLD**MEDICINE – The Penicillin Story**

(A classroom. Standard tables/desks and chairs. There is an interactive whiteboard upstage centre (or a flip chart) SEE PRODUCTION NOTES. Two special tables required. One which has a 'control box', with a large red button and the other has an old-style telephone on it. SEE PRODUCTION NOTES. The pupils enter, clutching bags and books.)

GEORGE

Have you seen Fizzy today?

MARY

Didn't he say he was going to the doctors?

PETER

Yes.

MARY

What's the matter with him?

PETER

Some bug or other, he said. Made him feel queasy.

JESS

Well, I hope he's not going to have a bout of queasiness here.

MARY

Don't be such a wimp Jess, we all get it once in a while. And when we do we go to the doctor and get some penicillin or something. Problem solved.

(MISS SMITH and FIZZY enter.)

FIZZY

Did I just hear you say get some penicillin, problem solved, Mary?

MARY

Yes, Mr Fitz.

FIZZY

I hope you're right because I've just been prescribed penicillin, got a bit of a chest infection. Nothing too serious.

MISS SMITH

Would you like me to take over today? I think you said we'd study chemical formulae.

FIZZY

Thanks for the offer, Miss Smith, but I have an idea. Who can tell me anything about the discovery of penicillin?

(There is total silence.)

FIZZY

Right. I think we'll make that the topic for the day. *(He reveals IMAGE NO.1. Mouldy bread. SEE PRODUCTION NOTES.)*

THE CLASS

Ugh! Yuk!

FIZZY

Yep. Mouldy bread. Covered in penicillin mould, which grows naturally on quite a lot of things.

PETER

My Mum found a cup in my room the other day which had grown mould in the bottom.

JESS

How disgusting!

FIZZY

In medieval times, they would have put that mould on a piece of cloth and strapped it to a wound. Some fungi were known way back in time as a cure for certain skin complaints or to treat open wounds but it wasn't until the 1870's before any serious medical study was begun.

SMITH

The first serious research in an attempt to isolate and prove the properties of a penicillium mould were

FIZZY

Stop there Miss Smith. We must explain this properly. We must go back in time and meet the man who began the modern story of research into the properties of penicillin.

(FIZZY presses the large button on a control box on his desk, there is a whooshing sound and everyone grabs hold of their desks as though moving at high speed. IMAGE 2. The French flag. The French National Anthem plays briefly. SEE PRODUCTION NOTES.)

FIZZY

Well, here we are, in Lyons in France. To be more precise, we are in the Military Heath Service School of Lyons. We are here to meet a man called Ernest Duchesne. The year is 1897.

(DUCHESNE enters.)

FIZZY

Welcome monsieur.

DUCHESNE *(French accent)*

Bienvenue à vous tous. Please, allow for my poor English. My name is Ernest Duchesne, I am a doctor and have been testing a mould - um - called penicillium glaucum, which I found cured typhoid in guinea pigs. I did many tests and my thesis for my doctorate was based on that research. As you see it was good enough to make me a doctor. I passed my research to the Institute Pasteur but they ignore it. It went no further. Maybe because I am only twenty three years old and they think they know much better. That is a joke like the English make, no?

SMITH

(Laughing to be polite.) Very good. What made you research the penicillium?

DUCHESNE

Zat was – ah – ‘ow you say - interesting. Arab stable boys stored saddles in dark damp areas so that mould would grow on it. They noticed zat zee mould cured sore on the horses’ backs caused by zee saddles. Zee mould was a penicillium.

SMITH

Was there no more research done following your own?

DUCHESNE

No. I would have done it myself but I have been given an internship at Val-de-Grâce for one year and then I will be a second class Major of Medicine. My career is now in zee army.

(DUCHESNE Exits.)

FIZZY

And so Duchesne became too busy to return to his study of moulds. He married in 1901 but, sadly, his wife died in 1903 from tuberculosis. In 1904 Duschene himself contracted tuberculosis and was discharged from the army. He died in 1912 at the very young age of thirty seven.

JESS

What a sad story. Poor man, nothing seemed to go right for him.

SMITH

It is a sad story, especially for him and his wife because if he had pursued his development of penicillin it could have prevented them from dying so young as antibiotics are used in the treatment of the disease now.

FIZZY

It’s time to move forward for the next chapter in the discovery of penicillin as a valuable medical product. We have to go forward to 1928, so hang on to your hats.

(FIZZY presses the large button on a control box on his desk and with the sound of the wind the classroom is transported to its destination. IMAGE 3. Picture of the British flag and ‘God Save the Queen’ plays briefly.)

FIZZY

We are now in the laboratory of Doctor Alexander Fleming in Saint Mary's Hospital in London. Dr Fleming works for the Inoculation Department and he is researching infections caused by the staphylococcus bacteria.

JESS

Excuse me Mr Fitz, but what is staph...staph..that bacteria you mentioned.

SMITH

Funnily enough, most doctors call it 'staph' – like you just did. Staph infections may cause disease due to direct infection or due to the production of toxins by the bacteria. Boils, impetigo, food poisoning, cellulitis and toxic shock syndrome are all examples of diseases that can be caused by the staphylococcus bacteria.

SALLY

I had an abcess under my tooth once and the dentist said it was a staph infection.

FIZZY

Another good example. Right, back to Dr. Fleming...

(FLEMING enters holding a petri dish.)

FLEMING

Well this is very odd. I stupidly left this dish of staph bacteria without a lid and this mould has randomly grown on it. And what's more – the mould has killed all the bacteria around it! This is very exciting. I need an expert on moulds!

(FLEMING picks up the telephone. SEE PRODUCTION NOTES)

FIZZY

Fortunately, in the same hospital Dr Charles La Touche was working on moulds and how they affected asthma sufferers and Fleming was able to ask his advice.

(La TOUCHE enters)

LA TOUCHE

What is it, old man? How can I help?

FLEMING

(Showing the petri dish to La TOUCHE) Ah, Charles, I hope you can help me. I smeared the dish with a staphylococcus culture and now it's got a blue-green mould on it. And it looks like mould is destroying the staphylococcus. Do you know how this happened and what it is?

(La TOUCHE peers at the dish.)

LA TOUCHE

Well it must have been contaminated by airborne spores. That's how moulds travel. Do you have windows or doors open?

FLEMING

Always, and I'm afraid I forgot to put the lid on the dish.

LA TOUCHE

Well there you are then. Looking at the mould I would say that it is *Penicillium rubrum*.

(There is a shout offstage)

VOICE *(offstage. American accent.)*

Wait a minute! Wait a minute!

(IMAGE 4. The American Flag. Short burst of the American anthem. SEE PRODUCTION NOTES Enter CHARLES THOM)

THOM

That is not *penicillium rubrum* it's most definitely *penicillium notatum*.