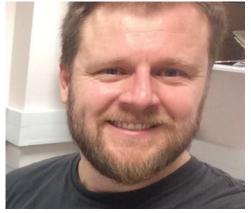


**Professor Robert Pal** 

**Microscopist** 



### Hi there! I am Professor Robert Pal – A microscopist



#### Where do I work?

I work at Department of Chemistry at Durham University where we build and use high-powered light microscopes to study the invisible.

#### What did I like doing when I was at school?

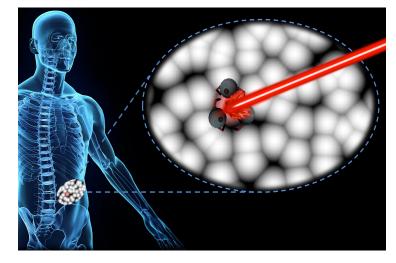
I have always loved nature and science and I was not really good in other things. Up until the age of 12, I wanted to be David Attenborough! Then I got more and more fascinated with chemistry.

### What do I like doing in my spare time?

I fish, forage and love the idea of being self-sustained. We have a small farm with 22 rare breed cows and other feathered and furry residents.

#### What do I do as a microscopist?

My research involves the development of new microscopes that scientists use to look at how new substances interact with living cells. We even have tiny machines that can find, bind and selectively destroy certain types of cancer when it is activated by light.



#### How does what I do make the world a better place?

Our microscopes help other scientists to look even more closely at the human body and to learn new things about how to treat cancer and other life-altering diseases in a completely new way, using nothing but light.

### What I like about my job

The best thing about my job is knowing that it could potentially help to save someone's life. I also have the pleasure of working with many young scientists and watching them become talented scientists themselves. The lab feels like one big family away from home.

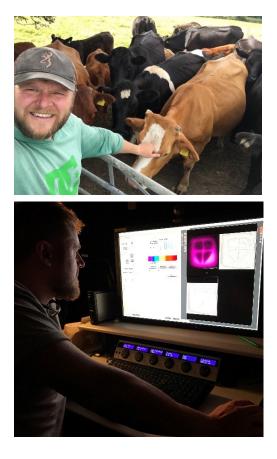


### **Challenges I have faced**

I was never picked first in sports, nor was I the best in many of the subjects taught in school. I was not the coolest kid on the block, but I had a passion and a dream to become a well-known scientist and be called a professor. I studied hard and I continue to learn.

#### If you want to be a microscopist, you need:

- to have an interest in nature and the human body
- \* to have a great imagination as often we are limited in scientific information about how our body works and you need to connect the dots yourself to find something new and exciting
  - to be curious and inquisitive about seeking answers to questions - the harder they are, the greater the reward will be when you are able to answer them



### **Discussion time**

Would you like to be a microscopist like
Professor Robert Pal?
Why? Why not?



- What skills and interests do you already have that would help you become a microscopist?
- What new skills and knowledge would you need to develop?



Professor Robert Pal is a STEM ambassador. Click <u>here</u> to access free STEM Ambassador support and resources.

#### Free supporting resources for microscopy

Bringing Back Glass – see 'Making your own microscope'

Why & How magazine – see pollen in 'Pictures for Talk' in issue Autumn 2020

<u>I bet you didn't know...</u> articles use cutting-edge science research as a context for learning. Teacher Guides describing the research and activities and investigations for children can be used as classroom presentations. See:

- Which face mask you should wear
- How to grow a new skin

Created by the Primary Science Teaching Trust

