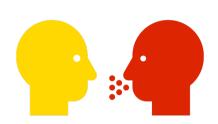
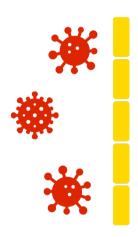
Getting Nosy About Infection

Peter Openshaw, Chris Chiu, Cecilia Johansson

Why do some people get ill with a viral infection when others don't? Scientists know that this can be affected by the amount of **exposure** as well as if your body made **protective antibodies** after a prior infection. But, this isn't the full story!





Researchers at Imperial have discovered that for a coldlike virus that affects your respiratory tract (nose, throat, lungs, etc), what's going on in your airways *before* you're even exposed to a virus can make all the difference.

They found that something that affects if you get sick or not is the state of the cells that line your nose (your "nasal mucosa"):

- If these cells are inflamed with white cells called 'neutrophils', you're more likely to get ill.
- If there is no sign of neutrophils, you're unlikely to develop the cold.

This is because the inflammation gets in the way of other immune responses, making it harder for your body to fight the virus.

This research is an example of the amazing things that **Human**Challenge studies (described below) allow researchers to discover

How do you think these experts contributed to this work?

Immunologists Virologists Clinicians