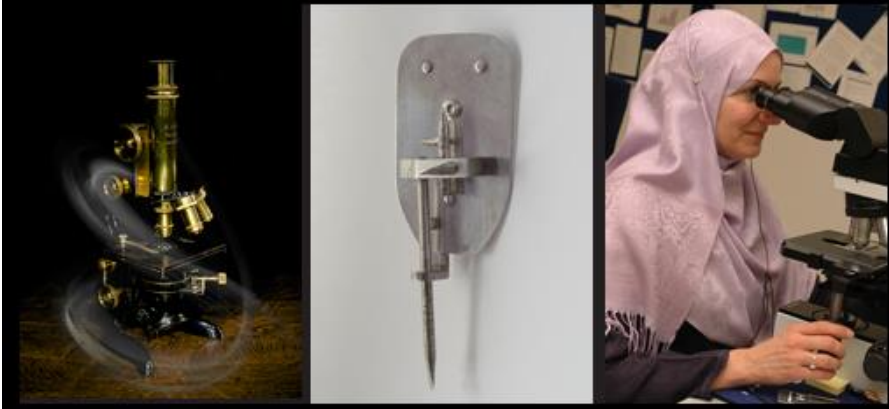




The Royal College of Pathologists

Pathology: the science behind the cure

Object 1: The light microscope



What is it?

The word microscope comes from the Greek for 'to look at something small'. A microscope is used to view objects that are too small to see with the naked eye such as bacteria or cells. This object is called a 'light' microscope because it uses visible light to illuminate the object being viewed.

When was it invented?

The Romans discovered the magnifying properties of lenses but it wasn't until 1590 that Dutch spectacle makers made the first microscope. Robert Hooke described the appearance of living tissue under the microscope for the first time in 1665. Two decades later the Dutch cloth merchant Antoni van Leeuwenhoek developed a simple, hand-held microscope, which enabled him to see bacteria and blood cells for the first time.

How has it changed modern pathology?

The microscope is probably the most widely-used instrument in modern pathology laboratories. It enables pathologists to make millions of diagnoses every year, determining what treatment is the most appropriate for each patient. Histopathologists, haematologists, microbiologists and many other pathologists examine human tissue, blood cells and bacteria under the microscope to identify the cause and effects of disease.

How can I find out more about microscopes?

To see older microscopes you can visit museums such as the [Science Museum](#) in London.

Find out more at the [Whipple Collection](#) website.