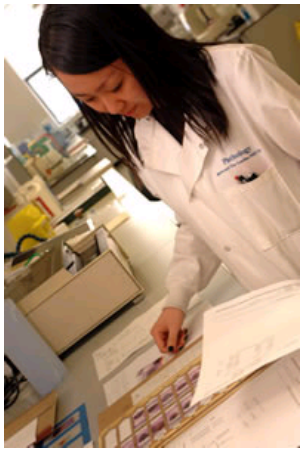
# Specialties



The four main pathology specialties are Histopathology (the study of disease in human tissue), Haematology (the study of disorders of the blood), Chemical Pathology (the study of chemicals in the blood and other fluids) and Medical Microbiology (the study of infection).

Some of the broader specialties include sub-specialties where pathologists have gone on to specialise in a particular area. Histopathology, for example, includes neuropathology (the study of diseases of the brain and nerves), dermatopathology (the study of diseases of the skin) and paediatric pathology (the study of disorders of babies and children).

Did you know? On average, every person in England has 14 tests per year, diagnosed by a pathologist.

## Chemical Pathology

Chemical pathology (also known as Clinical Biochemistry) is the study of changes in chemical composition of body fluids in the diagnosis and monitoring of disease processes. For example, blood sugar in diabetes.
Read more: Chemical Pathology »

## Clinical Cytogenetics

Clinical cytogenetics is a laboratory based science which involves processing and analysing the chromosomes from different types of samples with the purpose of detecting and interpreting chromosome abnormalities.

## Clinical Embryology

Clinical embryology includes the use of in vitro fertilisation (IVF).

## Cytopathology

Cytopathology is the study of abnormal cells in body fluids, smears and tissue samples. For example, cervical smears for the detection of changes in the cervix that could lead to cancer.

## Dermatopathology

Dermatopathology is a subspecialty of dermatology that consists of the study of skin disease at a microscopic level.

## Forensic Pathology

Forensic pathology is the determination of causes of death for medico-legal purposes. For example, to distinguish between accidental death, suicide and murder.

## Genetics

Genetics is the study of the changes underlying genetic diseases, for example, in cystic fibrosis.

## Haematology and Transfusion Medicine

Haematology and transfusion medicine include the diagnosis and treatment of diseases of the blood, for example, anaemia, leukaemia and the organisation of blood transfusion.
Read more: Haematology and Transfusion Medicine »

## Histocompatibility and Immunogenetics

Histocompatibility and Immunogenetics - Clinical scientists within this area of work are mostly involved in the genetic matching of prospective solid organ and haemopoietic stem cell (including bone marrow) donors with patients.

## Histopathology

Histopathology is the study of diseased tissue, for example, breast lumps or specimens of bowel removed because of suspected cancer, including examination under the microscope.
Read more: Histopathology »

## Immunology, Histocompatibility and Immunogenetics

Immunology, Histocompatibility and Immunogenetics include the study of the body's immune system and its disorders. For example, allergies, rheumatoid arthritis and tissue matching for organ transplants.

## Metabolic Medicine

Metabolic Medicine is a group of overlapping areas of clinical practice with a common dependence on the detailed understanding of basic biochemistry and medicine. These areas fall within the territory of both physicians and chemical pathologists. They include clinical nutrition, lipid abnormalities, diabetes, metabolic bone disease, porphyria and adult inherited metabolic disorders.

### Microbiology

Microbiology is the diagnosis of infection caused by bacteria, fungi, parasites and viruses; identification of the best treatment options for infection; and the monitoring of antibiotic resistance. It also includes testing for how well a patient is responding to treatment of infection.
Read more: Microbiology »

### Neuropathology

Neuropathology is the study of diseases of the nervous system. For example, stroke and brain tumours.

### Paediatric Pathology

Paediatric pathology is the study of disease in fetuses, babies and children. For example, stillbirths and childhood cancers.

### Toxicology

Toxicology is the science of poisons, for example, measuring blood levels of drugs after an overdose.

### Transfusion Medicine

Transfusion Medicine is the branch of medicine that is concerned with the transfusion of blood and blood components.

### Veterinary Pathology

Veterinary pathology is the study of diseases in animals by specialised veterinary surgeons. For example, BSE and rabies.

### Virology

Virology is a specialised branch of medical microbiology. It is the diagnosis and treatment of infection such as HIV and hepatitis.

## Our Events

- NPY Event Registration Form
- Events by Month
- Events by location
- Promotional Materials Request Form
- Pathology in Focus; Photography Competition

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The Royal College of Pathologists