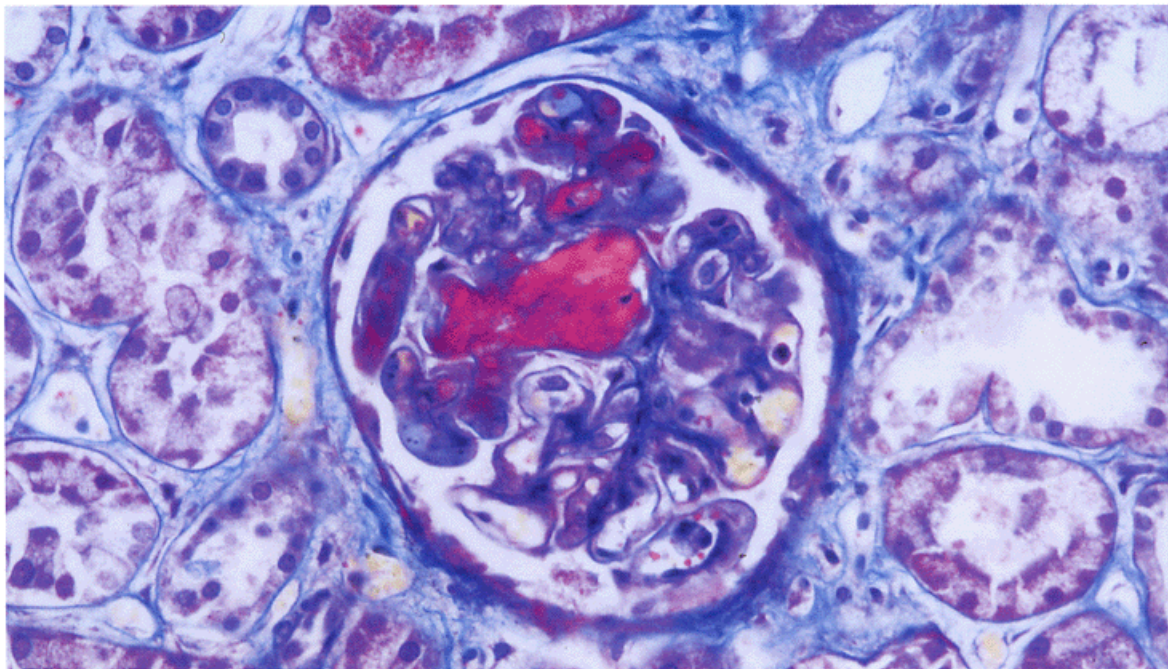




Pathology and Parasitology

FOR AQUATIC ANIMAL DISEASE DIAGNOSIS AND ENVIRONMENTAL MONITORING

Our highly skilled and experienced staff employ an extensive suite of histopathology and electron microscope techniques for solving problems of parasite and disease diagnosis of fish and shellfish and in the application of pathology for environmental quality assessments.



FISH AND SHELLFISH DISEASE
CHARACTERISATION AND PATHOGENESIS

DISEASE BIOMARKERS FOR AQUATIC
ENVIRONMENTAL MONITORING

PARASITE SURVEYS FOR FISH DISEASE CONTROL

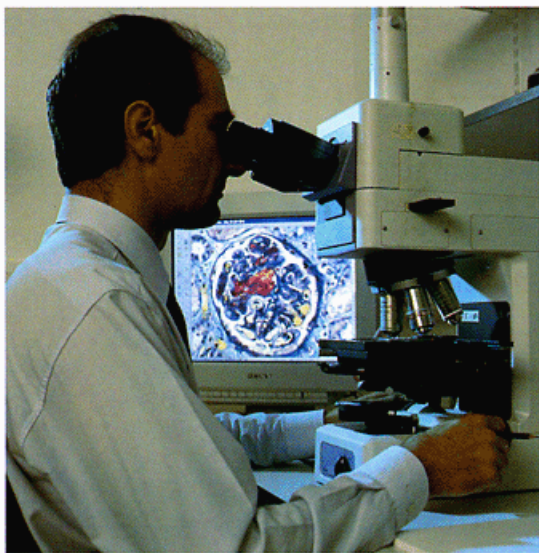
PATHOGENIC EFFECTS OF PARASITES AND
OTHER DISEASE PRODUCING AGENTS

RAPID DIAGNOSIS OF PATHOLOGICAL
CHANGES IN FRESH TISSUES

Unique, world-leading expertise

- CEFAS has over 25 years experience and expertise in pathology and parasitology for disease diagnosis, parasite identification, and environmental monitoring.

- Our experts possess a detailed understanding of the pathogenic effects of parasites on their host organisms.
- We are recognised as a leading authority in the use and interpretation of disease biomarkers for assessment of aquatic environmental quality.
- CEFAS is the International Reference Laboratory for applying hepatic pathology in aquatic environmental monitoring programmes.
- Our expert diagnostic capability is strongly complemented by an active research programme and specialist expertise in virology, microbiology and state-of-the-art analytical techniques.



Comprehensive reference collection

- CEFAS maintains the international Registry of Aquatic Pathology (RAP), a unique reference collection of pathological and parasitological conditions, with over 500 accessions.
- The extensive RAP collection includes examples of disease conditions and parasites from freshwater and marine fish and shellfish from around the world, and is constantly being updated and enhanced.
- The RAP provides a valuable resource contributing to the rapid and accurate diagnosis of fish and shellfish parasites and disease.

Integrated facility for sample preparation and analysis

- State-of-the art electron microscope suite with image analysis and x-ray microanalysis facilities for both scanning and transmission microscopy.
- Research grade light microscopes, including phase contrast, Normarski interference contrast optics for resolving details of parasites and fresh tissues, and full photographic capabilities.
- Cryostat for sectioning of frozen specimens for rapid diagnosis and research applications.

Capability and experience in the analysis of:

- a wide range of samples including tissues, organs and cells;
- aquarium, cultured and wild, temperate and tropical fish and shellfish species from freshwater, estuarine and marine environments;
- all major groups of parasites and pathogens, with particular expertise in protistan parasites.

Rapid and responsive service, high quality reports

- Image archiving and analysis systems allow rapid compilation of reports containing high quality specimen images;
- Image data can be output in a wide range of formats including, photographic film, video or CD allowing transfer by electronic mail.

Research, diagnosis, training and consultancy

CEFAS has a world-wide reputation for excellence in disease diagnosis and health monitoring. We support an extensive and complementary R&D programme into development of diagnostic techniques, microbiology and parasitology to maintain and further enhance our leading-edge capabilities.

We also offer

- training and support in disease diagnosis
- systems, technical and site consultancy service for establishing fish pathology research capability
- experience in fieldwork and related studies

For further information about any of our services or to discuss your needs with one of our specialists please contact