CLINICAL PATHOLOGY

Course Organiser: J Archer
Lecturers: J Archer and T Williams
Terms: Lent and Easter

Aims:

This course aims to provide a bridge between the other 4/5th year courses and application of those principals in clinical cases in the final year rotations. The aims are therefore to:

1. enable the students to do practical ‘bed-side’ clinical pathology including making of blood smears, use of practice-type analysers and urinalysis, simple cytology.
2. enable the students to use their previously obtained knowledge of the scientific basis of clinical pathology in a practical way .in the diagnosis and monitoring of large and small animal cases in practice.

Objectives:

By the end of this part of the course the student should:

- understand how to make and interpret a blood smear and how to perform a fine needle aspirate and interpret common cytology preparations.
- understand how to analyse a urine sample
- understand how to interpret the laboratory data in a clinical case in a variety of diseases in dogs, cats, horses, farm animals and rabbits

5th Year Lecture list:

17–18. Interpreting cytology TW
Interpretation and development of algorithms for classification of FNA aspirates from superficial and subcutaneous masses, and samples collected from visceral organs by ultrasound guided FNA. Cytological criteria of malignancy. Classification of different cell types in tumours. Cytology of common cutaneous lesions, lymph nodes: inflammatory/ infectious, immune mediated, neoplasia and metastatic neoplasms.

19. Analysing clinical pathology data JA
How to analyse clinical pathology data using examples of common cases. Of disease in small and large animals. Material for the associated problem-based learning session will be distributed during the lecture.
Laboratory/Case-based Sessions:

Lent term:

Practical
Combined/integrated cytology and histology of “lumps and bumps”. and oncology. Microscopy of selected common tumours seen in practice, cytology and histology.

Easter term:

Problem based learning sessions 1 and 2
Two sessions in which the whole class will be divided into 10 x groups of 6 (½ of groups per session). The groups will be given cases to work on ahead of time (see above). One case per group to be presented by a person chosen by the group – approx. 10 mins per case with time for questions/comments from other groups. Text books will be provided and facilitators to answer questions. Each group should work on the case to be presented and then work on some of the other cases. Cases to be selected to cover all areas likely to be covered in practice e.g. renal, liver, GI, hematology, acid base, neoplasia, endocrine, infectious disease including cytology if pertinent to presenting signs i.e. respiratory/leukaemia/lymphoma. In dogs cats rabbits horses food animals. Total of 20 cases.

Revision practical
Case-based examples covering aspects of haematology, clinical biochemistry, urine analysis, endocrine test results, cytology, etc. across a range of species. These to include blood films and cytology samples where appropriate.