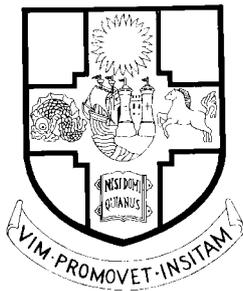


**Internal Medicine Intern  
which may be followed by  
ECAMS Approved AVIAN  
MEDICINE & SURGERY  
RESIDENCY**



**EUROPEAN COLLEGE OF  
AVIAN MEDICINE AND SURGERY  
(ECAMS) Approved Intern Program  
which, if successfully completed, will lead to the  
ECAMS RESIDENCY PROGRAM**

**Department of Veterinary Clinical Sciences  
School of Veterinary Medicine  
Bristol University, Langford House, Churchill.  
Bristol, Avon UK**

and

**Great Western Referrals Ltd  
10-14 County Park Estate, Shrivenham Road, Swindon, Wilts UK**

September 30, 2003

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# 1. Introduction

A hitherto successful ECAMS residency program has been run for the last three years between Lansdown Veterinary Surgeons and Bristol University (Langford House). During the course of which, two residents have received avian training and exposure at Lansdown Veterinary Surgeons, under the direction of a Diplomate of ECAMS, whilst Specialist training in other disciplines has been provided by academic staff at the University of Bristol. Residency Director and Residents have provided lecturing and avian clinics at the University of Bristol during the course of the training period.

In order to improve the undergraduate teaching, it is now appreciated that it would be advantageous to develop a full time avian and exotic animal service within the University of Bristol. To this end, the two parties (Bristol University on the one part and Great Western Referrals - formerly Lansdown Veterinary Surgeons) put forward the following proposal for a structured Intern in Companion Animal Medicine (with additional avian experience and training), to be followed by an ECAMS approved Avian Residency.

Great Western Referrals is a new multi-disciplinary Specialist-staffed Referral Service + 1<sup>st</sup> and 2<sup>nd</sup> Opinion Avian service + Out of hours Emergency Companion Animal service. This serviced will be staffed by Diplomate of ECAMS plus European Specialists in Orthopaedic and Soft Tissue Surgery, Internal Medicine and Diagnostic Imaging. Great Western Referrals is based in Swindon and will open on June 1<sup>st</sup> 2004.

This Residency program will be Directed and Supervised by a Diplomate of ECAMS.

## **2. Definition**

This program comprises an 18-month Intern program, comprising 12 months Companion Animal Internal Medicine plus 6 months introduction to avian medicine and surgery, to include a 3-6 month training period in avian form and function, diagnostic pathology and poultry diseases.

If completed to the satisfaction of the Intern Supervisor and the ECAMS Credentialling Committee, this will be followed by a 2.5 year ECAMS Approved Residency in Avian Medicine and Surgery in order for the Resident to acquire in-depth knowledge of avian medicine and surgery and its supporting disciplines under the supervision and guidance of a Diplomate of the European College of Avian Medicine and Surgery ("Diplomate").

### **3. Objectives of the Avian Medicine and Surgery Training Program**

#### ***3.1 Objectives of the Training Program***

The intern and residency objectives will be match the requirements of the ECAMS Residency training as listed on the ECAMS Constitution and Information Brochure.

The level of knowledge, skills, experience and ethical standards shall match the requirements of ECAMS as listed on the ECAMS Constitution and Information Brochure.

The training program will provide an extensive practical experience with a wide variety of avian species (ie companion birds, ornamental birds, zoo birds, racing pigeons, birds kept for falconry, wild birds, ratites).

#### ***3.2 Training program description***

This program comprises an 18-month Intern program, comprising 12 months Companion Animal Internal Medicine plus 6 months introduction to avian medicine and surgery to include a 3-6 month training period in avian form and function, diagnostic pathology and poultry diseases.

The internship commences with 6 months exclusively with dogs and cats (to include Companion Animal Emergency Rotation), based full time at Bristol University, followed by 6 months exclusively birds, small mammals and exotic patients (plus Companion Animal Emergency Rotation) based entirely at Great Western Referrals.

During the internship, the candidate will be under the supervision of a Diplomate of the related European College or American Board. The Companion Animal fields covered will include: internal medicine, diagnostic imaging, general surgery, anaesthesiology, orthopaedics and ophthalmology.

During the internship, basic knowledge will be attained by setting study topics on the following aspects:

- *Avian form and function* - theoretical and practical training in co-operation with basic sciences
- *Taxonomy and the geographical distribution of birds* - recognition of the most commonly encountered species in avian practice, their natural history and requirements in captivity
- *Backyard poultry diseases* - theoretical and practical training
- *Theoretical and practical training in diagnostic pathological techniques in birds other than poultry* - including autopsy technique, correct handling of specimens for further examination, cytology, histology, microbiology

The intern will be involved in the diagnostic work-up and treatment of patients. He or she will perform the daily examination of patients including the routine examination techniques for sample collection.

So long as this is completed to the satisfaction of the Intern Supervisor, Bristol University and ECAMS, the Intern may progress to undertake a 2.5 years ECAMS Approved residency program in order for the Resident to acquire in-depth knowledge of avian medicine and surgery and its supporting disciplines under the supervision and guidance of a Diplomate of the European College of Avian Medicine and Surgery ("Diplomate"), meeting all the requirements as laid down in the ECAMS Constitution and Information Brochure.

**Participation of Diplomates of the European College of Avian Medicine and Surgery in the avian medicine and surgery Residency Program:**

1. The Program will be supervised by a diplomate of ECAMS.
2. The Diplomate will not train more than three (3) residents concurrently.
3. The Program Director shall be responsible for the administration and continuity of the Program.
4. Resident Advisor (which may be, but need not be, the Director) shall be responsible for the administration and evaluation of the general and specific Program requirements for the Resident. Each Resident must be assigned a Resident Advisor by the Program Director within the first calendar quarter of their Program. The Resident will be a Diplomate.
5. The Program Director and Resident Advisor may be the same individual.
6. Supervision will include consultations, case discussions, and case managements with actual cases. Supervision on a daily base is required. Daily supervision does permit the intermittent absence of the supervising Diplomate or the resident for vacations, meetings, days off, etc. As the residency progresses the level of *direct* supervision required and provided will be reduced, although case supervision and case meetings will be maintained.

**Evaluation of the Resident**

The Resident will meet with their Resident Advisor at least twice yearly for performance and progress evaluation.

**Application for certification as a Diplomate**

Following completion of the Program, the Resident may submit an application to the Credentials Committee for eligibility to sit the ECAMS entrance examination and, if successful, to be certified as a Diplomate of ECAMS.

### **3.3 Specific Program description**

1. At least 60% of the 2.5 year program will be spent on an avian medical and surgical service under the direction of the Diplomate, which will be based predominantly at GWR, in later years if sufficient case load permits, a minority of time may be spent at University of Bristol.
  
2. Resident responsibilities: the degree of responsibility assumed by the Resident shall be appropriate to the nature of the avian medical or surgical procedure and training experience. The Resident on an avian medical and surgical service shall be responsible for:
  - a Receiving clinic appointments.
  - b Supervising daily management of hospitalised animals.
  - c Participation in clinical teaching.
  - d Providing optimal clinical service and prompt professional communications.
  
3. The caseload of “Lansdown Veterinary Surgeons, Avian and Exotic Animal Department”, to become “GWR”, is sufficient to afford the candidate adequate exposure to all required phases of practice of the specialty. The case load of Lansdown Veterinary Surgeons Avian department, which will be incorporated within Great Western Referrals (where the majority of avian cases will be seen) is currently in excess of 2,500 avian cases per annum. Avicultural site visits/consultations will form part of the caseload.

The Resident will spend in excess of 60% of his / her time in clinical rounds and, in addition, 25% of their time in patient evaluation, case study, general speciality study, to participate in rounds, lecture, workshops, and work with other Board Certified Specialists in other complimentary disciplines. To this end it is a requirement of the training program that the Resident shall have 20% of each week (one full working day), set aside for study, case and paper presentations or research.

**The following periods of study must be undertaken by the resident during the course of the training program.**

**Anaesthesiology, diagnostic imaging, surgery, and pathology service rotations**

1. *Anaesthesiology*: During the residency period the Resident will obtain a total of two (2) weeks of training under the supervision of Dr P Murison BVMS PhD DipVA Dip ECVA, Department Clinical Veterinary Medicine, University of Bristol.
2. *Diagnostic imaging*: During the residency period the Resident will obtain a total of at least two (2) weeks of training under the supervision of Dr Francis Barr MA, Vet MB, PhD, DVR, DECVR MRCVS. Department Clinical Veterinary Medicine, University of Bristol.
3. *A one-month instruction and training* on basic surgical principles, radio-surgery and microsurgery under the supervision of Dr Alistair Barr MA VetMB PhD, DipECVS, Cert SAO, DEO, DVR, MRCVS, Professor Peter Holt BVMS, PhD, CBiol FIBiol, DipECVS, FRCVS, Department Clinical Veterinary Medicine, University of Bristol. Additional instruction in avian microsurgery and radio-surgery will be provided at Great Western Referrals by Neil Forbes BVetMed CBiol MIBiol DipECAMS FRCVS, together with the resident (ECVS) Companion Animal Surgeon.
4. *Pathology*: During the residency period the resident will obtain at least four weeks training under the supervision of Professor Mike Day BVMS, PhD, BSc, MRCPATH, DipECVP, FASM FRCVS, Department Clinical Veterinary Medicine, University of Bristol.
5. In addition to this training in general veterinary pathology, the resident will prepare 30 avian case books. These case studies will involve clinical cases which they have undertaken themselves, and shall include where relevant clinical pathology, radiology, gross pathology, cytology and histopathology. These 30

cases will be presented and defended in front of Professor Day and any pathology residents or under graduates in training.

### **Emergency duty**

The resident will participate in the companion animal emergency Out of Hours service as well as avian and exotic animal emergency Out of Hours services at both the University of Bristol and Great Western Referrals through out the intern and residency period.

### **Residents will spend at least 20% of their Program in any or all of the following ways**

1. Research or clinical investigation.
2. Preparation of scientific manuscripts.
3. External avian medicine and surgery rotation with the approval of the Resident Advisor.
4. Anaesthesiology, diagnostic imaging, and pathology service requirements (see sections above).
5. External rotation at Poultry Health Department.

### **Study and education**

1. A minimum of fifty hours of formal continuing education will be undertaken each year. This may be within University of Bristol, Great Western Referrals, this will comprise weekly case meetings, study seminars, University post Graduate Study Groups, regional or national meetings (such as British Veterinary Zoological Society, Psittivets, BSAVA (avian topics), Improve CPD (avian Topics) or other similarly appropriate training).
2. Required attendance: during avian medical and surgical service rotations, the Resident will attend avian clinical pathological conferences and medical and surgical residents conferences and avian medical and surgical ward rounds at least twice monthly.

3. The Resident is advised to attend some or all of the following conferences
  - a. Avian medicine and surgery conferences.
  - b. Poultry disease conferences
  - c. Veterinary internal medicine conferences
  - d. Veterinary anaesthesiology conferences.
  - e. Veterinary diagnostic imaging conferences.
  - f. Veterinary pathology conferences.
  - g. Veterinary surgery conferences.
  - h. Scientific journal clubs.
  - i. Other scientific presentations, including human medical conferences.
  
4. Attendance at, at least two international avian medicine and surgery conferences (Eg AAV, EAAV, AAAVA) with active participation in wet labs is required during the residency period.

**Case, Activity, and Presentation Logs will be produced on a three monthly basis until such time as the Chair of the ECAMS Education committee gives permission to provide every 6 months through out the period of the residency program.**

### **Research and publications**

1. The Resident will complete an original investigative research project that contributes to the advancement of avian medicine and surgery. The resident will be required to publish the findings of this project.
  
2. Publications:
  - a. Two (2) original peer reviewed avian medical or surgical papers in a well established internationally refereed scientific journal (as appear in the Appendixes of ECAMS Constitution). In at least one (1) of these papers the resident must be the principal author; whilst in the second paper they may be first or second author.
  - b. Two case reports, published or in a form suitable for publication of which the resident is author or co-author.

### **Seminar and teaching responsibilities**

1. The resident will present and defend their presentation at, at least 2x one hour seminars each year, in front of graduate or post graduate colleagues or an open post graduate meeting.
2. The Resident *will* present cases at avian medicine and surgery conferences on at least 4 occasions during the training program.
3. The Resident *will* participate in the clinical education of graduate veterinarians and/or veterinary medical students assigned to the avian medicine and surgery rotations. This will take the form of formal lectures, avian clinics and avian elective training periods.

### **3.4 Documentation and verification of the avian medicine and surgery Residency Program**

The Program Director (Supervisor), Resident Advisor, Resident and the European College of Avian Medicine and Surgery have responsibilities for documentation and verification of satisfactory training for each resident.

**The Program Director, Supervisor and Resident will each be responsible for various documentation and authentication on a regular (3, 6 or 12 monthly basis), as is described in the ECAMS Constitution and Information Brochure. Such reports will be required to be made to the ECAMS Secretariat on a regular basis as is required according to the Constitution.**

**The European College of Avian Medicine and Surgery (Education Committee) is responsible for:**

The evaluation of Programs and Supervisors and for monitoring of each Resident's progress through the receipt of regular reports and communication of deficiencies to the Resident, Program Directors, and Resident Advisor.

**The following facilities are available for use by the Intern and Resident**

- A. A library containing recent textbooks and current journals relating to avian medicine and surgery and its supporting disciplines is accessible to the Resident both at GWR and Bristol University.
- B. A complete medical record system is maintained for each individual case and rapid retrieval of information about any patient or flock is provided.
- C. Separate rooms and appropriate equipment is available for comprehensive endoscopic, ultrasound, flouroscopy, radiography and MRI diagnostics at one or both sites.
- D. Pathology services:
  - 1. A clinical pathology laboratory for haematological, clinical chemistry, microbiologic, and cytological diagnosis is present at both sites. Clinical pathology reports are attached to the patient clinical records.
  - 2. Morphologic pathology: a separate room for gross pathologic examination is available. Facilities for histopathological examination birds and necropsy tissues is available. Anatomic pathology reports are retained and retrievable.
- E. Avian medical and surgical facilities:
  - 1. Avian examination rooms: the avian examination rooms are designed, constructed, used, and maintained consistent with the current concepts of practice. They are sufficient in number and size to accommodate the caseload.
  - 2. Treatment areas: Areas for intensive care, special procedures, isolation, and good nursing must be available. Intensive care units in the form of air

flow, humidity and temperature controlled units with an oxygen delivery system are provided.

3. Operating room: the operating rooms are designed, constructed, used and maintained consistent with current concepts of avian surgery. The surgery room(s) must be sized adequately for the patient, staff, and associated equipment. The sterile surgery rooms are ventilated according to the current concepts of aseptic surgery. Emergency lighting is available.
4. Anaesthetic and critical care equipment: appropriate anaesthetic and critical care equipment is available. Isoflurane and Sevoflurane vaporisers with an adequate scavenging system is provided. Routine monitoring of surgical patients with respiratory, capnography and cardiac monitors is under taken.
5. Surgical instrumentation: a full complement of general and special instrumentation for diagnostic and surgical procedures, must be available. Ophthalmologic equipment and orthopaedic instrumentation sufficient for current standards of practice is present.
6. Photography: photographic equipment for documentation of avian disease, is available.
7. Sterilization: steam and heat sterilization of surgical instrumentation and supplies is available, and the sterilization capacity is commensurate with the avian caseload.

**Once the Residency training is Completed the Resident shall apply to sit the ECAMS Examination, using the standard CV and application method as detailed in the ECAMS Constitution.**

All regulations in regard of the examination process are as laid down by ECAMS in the Constitution.

## 4. Proposed Timetable

### Year 1

Jan - June 2004

*SA Internal Medicine Intern* based 100% at Langford 4 days a week

1 day per week to study

To include:

Internal medicine of companion animals - dogs, cats, small mammals, birds, reptiles (including clinical pathology).

Diagnostic imaging, general surgery, orthopaedics and ophthalmology of companion animals

During this period the candidate should get instruction on basic surgical principles under the supervision of an ECVS surgeon and practical training in surgical techniques including training in electro-surgery and microsurgery.

SA Emergency service cover

July -Dec 2004

*Avian / Exotic Intern* based 100% at GWR 4 days a week

1 day per week to study

To include:

A 3-6 month training period in avian form and function, diagnostic pathology and poultry diseases is required.

Taxonomy and the geographical distribution of birds. Recognition of the most commonly encountered species in avian practice, their natural history and requirements in captivity (theoretical and practical training with co-operation of wild bird sanctuaries, quarantine facilities and zoos) - 3-6 weeks

Backyard poultry diseases (theoretical and practical training in co-operation with Poultry Health Department) - 4-9 weeks

Theoretical and practical training in diagnostic pathological techniques in birds other than poultry, including autopsy technique, correct handling of specimens for further examination, cytology, histology, microbiology (theoretical and practical training) - 4-6 weeks

Avian and Small animal emergency cover

## Year 2

Two days a week at Langford (1.5 days SA Internal Medicine, ½ day teaching SAP)

SA Internal Medicine Intern continues as detailed above

2 days a week at GWR (training)

Avian Medicine and Surgery training continues

1 day studying

Emergency duty: the resident must participate in an avian medical and surgical emergency service.

This second residency period shall comprise a two-and-a-half to three-year postgraduate training program under supervision of Diplomates of the ECAMS. The period is designed to educate the resident primarily in the art and science of avian medicine and surgery. There shall be additional instruction in the related disciplines of anatomy, physiology, diagnostic imaging, anaesthesiology, ophthalmology, clinical pathology, surgery, clinical nutrition, epidemiology, preventive medicine, avicultural medicine, and gross pathology.

At least 60% of the 2½-3 year program must be spent on an avian medical and surgical service under the direction of a Diplomat.

Resident responsibilities: the degree of responsibility assumed by the Resident shall be appropriate to the nature of the avian medical or surgical procedure and training experience. The Resident on an avian medical and surgical service shall be responsible for:

- a) Receiving clinic appointments.
- b) Supervising daily management of hospitalised animals.
- c) Participation in clinical teaching

Providing optimal clinical service and prompt professional communications.

### Year 3

2 days a week at GWR (training)

0.5 day a week Bristol Zoo

1.5 days Langford (1 day Specialist Training, 1/2 days teaching SAP)

1 day studying

1. *Avian anaesthesiology*: During the residency period the Resident must obtain a total of two (2) weeks of training under the supervision of a Diplomate, European or American College of Veterinary Anaesthesiologists or their equivalent if these requirements have not been fulfilled during the first years of the postgraduate training (internship).
2. *Avian diagnostic imaging*: During the residency period the Resident must obtain a total of at least two (2) weeks of training under the supervision of a Diplomate, European or American College of Veterinary Diagnostic Imaging or their equivalent. Alternatively radiology interpretation of the clinical cases of the resident should be performed under supervision of a Diplomate in diagnostic imaging.
3. A one month instruction and training on basic surgical principles, electrosurgery and microsurgery under the supervision of a surgeon approved by the ECAMS is required during the residency period if these requirements have not been fulfilled during the first year of postgraduate training (internship).
4. *Avian pathology*: During the residency period the resident must obtain at least three (3) months of training under the supervision of a Diplomate, European or American College of Veterinary Pathology (specialty in Veterinary Pathology, or Veterinary Clinical Pathology) or their equivalent.

Alternatively, the resident must obtain four (4) weeks of training

under the supervision of a Diplomate in Pathology in addition to evaluating 30 post mortem examinations of avian patients seen as clinical cases. The resident should be stimulated to present or attend clinical pathological conferences of his own patients. In the latter case he/she should supervise veterinary students preparing these clinical pathological conferences.

Take Cert Zoo Med June year 3

## **Year 4**

3 days a week at GWR (training)

2 days Langford (1 day Specialist Training, 1 day teaching SAP)

Training finished Dec year 4

## **Exam Preparation**

Study time is then available Jan - May in preparation for ECAMS examination

Anticipated 3 days a week study: 2 days a week clinical work (on a day rate basis)