



THE UNIVERSITY  
of ADELAIDE



# EQUINE ROTATING INTERNSHIP

Equine Health & Performance Centre  
School of Animal & Veterinary Sciences  
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Roseworthy  
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## Introduction:

This document is a general information brochure about the general rules and targets of the **Equine Rotating Internship (ERI)** Program organized by the Equine Health and Performance Centre of the School of Animal and Veterinary Sciences of The University of Adelaide.

For the ease of reading, the terms:

“The University” will be invariably used in the text to describe

The University of Adelaide;

“EHPC” will be invariably used in the text to describe the Equine Health and Performance Centre – School of Animal and Veterinary Sciences of The University of Adelaide;

“Intern” will be invariably be used at the masculine form to describe the candidate performing the **ERI** program no matter his or her gender;

and

“Internship” will be invariably used to describe or name the Equine Rotating Internship (ERI) proposed by the EHPC.

## Program description and objectives:

- The Internship is a 12 months intensive full time professional (clinical) formative program aiming to help the Intern to develop the interns capacity to identify and solve medical problems (within the disciplines of equine internal medicine, surgery, anaesthesia, reproduction and ambulatory services), the interns ability to work-up a case and the interns medical written and oral expression skills and to teach non graduated students the elements of day one skills (technical and non-technical as described in the DVM program of the University of Adelaide) they have to master at the time of their graduation .
- The ultimate aim of the Internship is to prepare the Intern to enter a specialty college qualifying (residency) program or to prepare him to enter a high standard level of equine general practice. The program is also based on and encounters the guidelines of the RCVS Professional Development Phase (PDP) for those Interns who registered for this program.

## Program structure:

- The Internship program consists of 52 weeks corresponding to 46 credits
  - o 41 Optional credits are for clinical training (medicine, surgery, anaesthesiology, theriogenology, ambulatory services)
  - o 5 weeks in total to prepare for a seminar (at a congress, continuous education or at the school), to attend a conference and for special rotations (research, rotation at other clinic, other specialty)
  - o 4 weeks are reserved for personal leave
- This program has no obligatory thesis work but a publication work in a peer reviewed scientific journal will be actively encouraged and facilitated.
- After successful fulfilment of the 46 credits of the Internship, the Intern will be acknowledged a Certificate of Completion of an Equine Rotating Internship.
- To support and help the Intern meeting the objectives and expectations of the Internship, a supervisor will be selected at the beginning of the program.
- The Supervisor will be appointed or may volunteer from the academic clinician staff of the EHPC and will provide regular (minimum 4 formal) objective evaluations of the Intern’s progresses throughout the program. The first evaluation will be at 1 month after starting the program, one after 3 months, then 1 every other 3 months.
- The Supervisor will facilitate or provide one study subject to the Intern, which will allow him to prepare and present a Seminar/Lecture (50 minutes presentation on the interns study or afferent literature) that will count for 3 credits amongst the 5 obligatory ones. Preferably this study will help the Intern to publish in a peer-reviewed journal.
- It is required that the Intern participate actively in student teaching activities of the EHPC, in clinical duties and during daily rounds presentation of hospitalised patients.

## Program documentation:

- The Intern is responsible for maintaining and updating documentation of the interns progress through the credits (in particular the optional 41 program credits = clinical rotation training) in the interns program handbook. These credits need to be validated by the clinician on charge during the clinics rotation.
- In parallel to this credit tracking in the handbook, the Intern will maintain the clinical/ technical skills tracking spreadsheet to help identify objectively where the intern needs to acquire competences.

## Continuing education:

- During the interns Internship, the Intern is encouraged to attend at least one CE meeting at a National or International level and ideally present the interns scholarly work. If the intern wants to participate to another CE meeting or workshop during the internship, the Intern needs to discuss this possibility with the interns supervisor first. Optional (non-obligatory) credits may be used for these activities.

## Leave:

- Within the 52 weeks of the program, 4 weeks (= 4 credits) are allocated to annual leave.
- Permission for vacation must be cleared by the Intern Supervisor in accordance with the clinician on clinics for the time of leave and after approval of the Head of Department or Clinic Service Lead following the SSO submission protocol of the University. It is strongly advised not to make plans or commit without prior approval. Discussing the leave dates and to accommodate for sufficient clinical cover is the Intern's responsibility.

## Clinical Training

### General guidelines:

- 1) **Safety** is a primordial element to respect. The Intern is required at all time to act safely for himself, the patient and every individual around them. A number of Standard Operation Procedure (SOP's) protocols has been edited for activities within the EHPC operations and must at all time be respected or implemented in case of insufficiency. Fatigue management is a part of this safety priority and the Intern needs to feel fully entitled to take enough rest when needed.
- 2) At any time, the Intern is responsible for the interns **own training** and is expected to be proactive. This means taking every opportunity to progress in diagnostic, medical, theriogenology, anaesthesiology and surgical training. It is also critical to take every opportunity to read the literature associated with the cases and medical documents (i.e. diagnostic imaging) or other topics that may come up in rounds or Journal Club.
- 3) **Time management.** When there are no cases or case-related activities going on in the hospital, the Intern need to take the opportunity to allocate time for self teaching, work on the interns research project or class work, prepare rounds topics (e.g. tutorials) for the students. It is important not to overcommit and reserve enough time for rest in the evenings and nights when possible and certainly when not being on call. The Intern need to remain aware of the interns capacity to fulfil the interns task safely and adequately. It is the interns responsibility and the interns right to manifest the interns need for rest especially after night and week-end duties.
- 4) Follow-up and patient care throughout their hospital stay and beyond. The Intern is responsible for their patients even when not on call (nights & Weekends). This is for own educational purpose and continuity of care. Patient well-being is the Intern's own primary responsibility. If a special situation arises, it can be discussed on a case-by-case basis with the clinician in charge of the block. Telephone follow-up with owners and/or RDVMs on cases is highly encouraged and the moment of completing the medical record is the adequate opportunity to undertake that task.

Follow-up includes:

- o Administration (paperwork) must be completed and updated the night before discharge for in-hospital patients and by the end of the day for outpatients. This way the senior clinician (who's ultimate responsibility is) can look at instructions prior to discharge.
- o Administration includes discharge letter, surgery reports, referral letters, SOAPs, invoice, phone calls, and medical records.

- A referral letter must be written for each patient who dies or is euthanized in the hospital or on transit to the hospital. This should be completed as soon as possible and preferably within one week. They must be reviewed and signed by the clinician in charge of the case.
- Patient care: this involves a great percentage of the time and it is the EHPC's mission to provide the highest standards of veterinary care. The Intern is expected to actively participate in the case work-up and to know all details of the clinical pathology data including recent changes, need to recheck parameters or pursue further diagnostic tests. Attention to detail and having a daily "to do list" will help the Intern with this task and the faculty members will initially assist with this as well.
- Proactive case care means reading current literature and looking for alternative plans, develop a personal opinion and plan BUT get approval from the clinician in charge before making ANY changes to treatment protocols. Independent thinking is encouraged and of primordial importance if the Intern wishes to pursue advanced training, such as a residency program. As the Intern gains more confidence and experience, the intern will also get more autonomy.
- Clear communication of instructions and directions is the way to prevent errors, mistakes and oversight. If instructions are not clear, asking informed clarification is strongly requirement. It is important not to assume anything without clear directions/instructions/communications.
- Student supervision and clinical teaching. As the Intern is ultimately responsible for the interns cases, the intern is expected to help and oversee closely students' activities (i.e. their patient physical exams, treatments, paperwork). Involving them in technical procedures needs to be adapted to the clinical situation and student skills. (An, emergency case like an acute colic may not be the most suitable for practicing IV injections and catheter placement). A direct supervision by the Intern or delegate professional nurse is in any case compulsory. The Intern must remember that he is ultimately responsible of the interns cases and no complication will be excused if it is due to a lack of supervision. As a clinical teaching auxiliary, the Intern is also expected to deliver clear and state-of-the-art scientific information to the students under the interns supervision. The Intern must be familiarised with the DVM 3 clinical rotation handbook to understand what are the students' expectations and what can be expected from them.

- Students (must be told that they) need to arrive with plenty of time to have clinical exams completed and drugs administered prior to morning rounds at 8:30 am.
- Students are supposed to know how to perform a basic TPR but it is good to ensure they actually do.
- Students must be stimulated to think about getting things set up for procedures.
- Students must be instructed in how to run a PCV/TP/Lactate/Glucose
- Students must be instructed in how to work the haematology machine.
- Students must be instructed in dating newly opened bottles of drugs.
- Students must be instructed to alert nurses to when drugs/patient labels are getting low.
- Students must be instructed on how to fill in treatment/intensive care sheets.
- Students must be involved and supervised in as many day one skills technical procedures as possible (injections of all type, nasogastric tubing, catheter placement, rectal palpation...).
- Students must help cleaning up after procedures they have been involved in (eg ensuring needles and syringes are put away, rubbish is in the bin and a quick hose of the floor) and especially when hospital is very busy. Working by example is the best way to induce this behavior.
- Prompt students to get involved in as many things as they can - the more they put into the rotation the more they will get out of it.
- Everyone is required to wash hands and use alcohol gel between patients and to wear gloves when manipulating biologic material.

- 5) Work organisation – facilitation. Elective and other booked procedures for the following day are to be prepared by the Intern based on available information (ie. Surgery: ensure tetanus status, prefill anaesthesia request and forward to surgeon for signature, conduct blood work, have surgical equipment prepared in conjunct with surgical nurse, clip surgical site after consultation with surgeon, ensure fasting protocol, have all diagnostic imaging documents ready and have read about the surgical procedure to be performed). If there are any uncertainties or questions seek advice from your senior clinician. For technical procedures like endoscopies (including gastroscopies), ultrasound examinations, radiographies, lameness locator, BAL, TTW, etc... the Intern is expected to actively organise (or delegate to the supporting nurse), the setup of the material that is most likely required (including input of patient details and connecting recording systems).
- 6) Participation in the afterhours roster. The Intern is participating to the after-hours, which includes weekends and public holidays. including week-ends and will be rostered in a way to guarantee service continuity for the hospital night watch and eventually primary opinion ambulatory service along with the other Interns and ambulatory service clinicians.

## Detailed guidelines during rotations:

### Morning expectations:

Interns must be present for morning checks early enough (generally between 7.00 and 8:00 am depending on caseload) to assist and supervise students where required performing clinical examination, administration of drugs) to be able to start the morning rounds at 8.30 am. Refer to area policy of work by pair for any treatment of procedures other than usual handling.

1. Inform students
  - a. Make sure they know the plan for the day
  - b. Help as needed (catheters placement, difficult horses / treatments, assessments etc.)
2. Perform or check the physical exam (PE) of **each** case independently from the students PE and assessment of the patient. Horses stabled in other areas of the EHPC than the ICU barn and especially the theriogenology area (yards) need to have their "TPR" performed and eventual treatments administered.
3. All tasks including treatments, placement of catheters and paperwork should be completed prior to the 8:30 am rounds.

### Daytime expectations:

- 1) Clinical checks/monitoring of all hospitalised patients of the rotation service but work as a team with the other Intern and help each other out.
- 2) Administration of medication to hospitalised patients
- 3) Filling up request forms and submit samples to VDL
- 4) Admission of the patients to hospital, taking the internstory and performing physical examination before the senior clinician is called to the case
- 5) When in the respective rotation, assisting in surgery, orthopaedic and medicine services
- 6) When in the respective rotation, assisting with theriogenology services
- 7) When in the respective rotation, assisting with anaesthesiology
- 8) When scheduled, assisting with primary opinion/ambulatory service
- 9) Assisting in clinical teaching of students during rounds, surgery, student lectures, and regular clinical activity
- 10) Receiving cases and provide routine and emergency medical care under direct supervision of the senior clinician.
- 11) Calling the senior clinician if necessary with any concerns (any time of day/night)- in doubt of the need to call, ALWAYS call .
- 12) Obtaining payment (of deposits) from owners
- 13) Communicating with clients after checking with senior clinician.
- 14) Helping in tidying up/cleaning room after consult (if nurse not available)
- 15) Medical records keeping:
  - o Read and correct students record / SOP's at least twice a day and provide feedback to them.
  - o Assist students in or write yourself
    - Writing surgery reports (within 24 hours)
    - Writing discharge instructions (prior to the horse going home) before forwarding them to the senior clinician for final review and signature
    - Writing a discharge report serves as instructions for owners and the referral letter for the RDVM
  - o Medical notes must contain enough information so that a different member of the service can follow easily what happened with the case if it comes back for re-evaluation (key lab values, diagnostics, diagnosis, etc.)
  - o Medical notes must be comprehensive but not monotonous and they need to be reviewed by the clinician in charge
  - o For hospitalised patients, discharge instructions, reports and referral letters must be completed and transmitted to the Client Relation team before the patient goes home
  - o Fill in hospital/treatment sheets for the following day when possible
  - o Treatment sheets should be prepared the day before - ensuring the correct treatment and instructions are on the treatment sheet and / or whiteboard.
  - o Treatment sheets must be completed after a procedure has been performed, including writing up any used drugs or fluids, bandages,... used with the details of dose (mg/kg and volume, administration route and frequency)
  - o Put both, the day of the week and the exact date on all patient paperwork (eg. treatment sheets, clinical exam forms, notes page, fluids charts): tthe interns makes the process of billing more efficient and accurate.

## Personal Evaluation Grid

Name of the candidate: \_\_\_\_\_

Option: Equine

Program:  Internship  Residency

	Excellent	Good	Average	Weak	Unacceptable	N/A
Fundamental sciences knowledge						
Application of clinical knowledge						
Clinical abilities						
Curiosity						
Communication skills						
Ethics-Professional standard						
Maturity						
Clinical Judgement						
Cooperation						
Time management-Organization						
Relation with clients/Referring veterinarians						
Record keeping						
Teaching aptitude						
Receptiveness toward direction and eagerness to learn						
Scholarly Achievement						
Overall potential for future resident position						

Assessor's name: \_\_\_\_\_

Assessor's signed: \_\_\_\_\_

Date: \_\_\_\_\_

## COMPETENCY CHECK LIST (based on the AAEP post-internship list)

### Medical knowledge

- Develop problem list with differential diagnosis, develop diagnostic plan, develop treatment plan
- Formulate a plan to evaluate and treat a patient with colic
- Formulate a plan for treating diarrhoea
- Formulate individual and herd health wellness programs
- Recognize and treat laminitis
- Formulate a plan for treating pneumonia
- Interpret results of haematology sample
- Interpret results of biochemistry and ion sample
- Interpret results of an arterial or venous blood sample
- Interpret an abdominocentesis
- Interpret a broncho-alveolar lavage cytospin
- Establish a prognosis

### Communication skills – Business skills

- Communicate a prognosis and anticipated costs of treatment
- Develop accurate estimates and charge appropriately for work performed
- Keep medical records and write discharge instructions
- Understand the cost of maintaining a veterinary practice
- Compassionately communicate when the situation dictates that euthanasia is an option

### Examinations

- Perform complete physical examination
- Examine upper airways with an endoscope
- Perform a pre-purchase examination
- Assess lameness and perform soundness exam
- Perform a neurological examination
- Perform a breeding soundness exam on a mare

### Reproduction

- Determine the oestrus status of a mare
- Pharmacologically manage mares repro cycle
- Perform ultrasound diagnosis of 16-day pregnancy
- Perform rectal palpation for a 25-day pregnancy
- Devise a treatment plan for uterine infection
- Treat retained placenta
- Obtain an endometrial biopsy sample and perform cytological evaluation
- Correct simple dystocia
- Inseminate a mare
- Perform rectal palpation for 45-day pregnancy

### **Diagnostic imaging - Radiology**

- Make and interpret radiographs of the foot
- Make and interpret radiographs of the fetlock
- Make and interpret radiographs of the carpus
- Make and interpret radiographs of the elbow
- Make and interpret radiographs of the shoulder
- Make and interpret radiographs of the tarsus
- Make and interpret radiographs of the stifle
- Make and interpret radiographs of the skull/sinuses
- Make and interpret radiographs of the cervical spine
- Make and interpret radiographs of the thorax
- Make and interpret radiographs of the thoracic spine
- Make and interpret radiographs of the lumbar spine
- Make and interpret radiographs of the abdomen adult
- Make and interpret radiographs of the abdomen foal

### **Diagnostic imaging - Ultrasound**

- Perform and interpret ultrasound of the abdomen general
- Perform and interpret ultrasound of the abdomen - colic
- Perform and interpret ultrasound of the thorax
- Perform and interpret echocardiography
- Perform and interpret ultrasound of tendons

### **Anaesthesia-local**

- Perform local anaesthetic block of the upper eye lid
- Complete a pain assessment with a scoring system and clinical observation
- Perform posterior digital nerve block
- Perform abaxial nerve block
- Perform low palmar nerve block
- Perform high palmar nerve block
- Perform radial nerve block
- Perform tibial and peroneal nerve blocks
- Perform arthrocentesis and local anaesthesia of the distal interphalangeal joint
- Perform arthrocentesis and local anaesthesia of the pastern joint
- Perform arthrocentesis and local anaesthesia of the fetlock joint
- Perform arthrocentesis and local anaesthesia of the medio-carpal joint
- Perform arthrocentesis and local anaesthesia of the radio-carpal joint
- Perform arthrocentesis and local anaesthesia of the tarso-crural joint
- Perform arthrocentesis and local anaesthesia of the tarso-metatarsal joint
- Perform arthrocentesis and local anaesthesia of the stifle (3 joints)
- Perform and monitor a CRI neuroleptanalgesy for standing surgical procedure=

### **Anaesthesia - general**

- Perform endotracheal intubation
- Install a urinary catheter (male and female patient)
- Properly place leads and record and interpret an ECG
- Install invasive arterial blood pressure system and interpret
- Anaesthetize a healthy patient for a short period (20 minutes) with triple drip
- Anaesthetize a healthy patient for 60 minutes
- Correctly conduct monitoring and assist recovery

### **Surgery**

- Management of wound healing by primary healing
- Management of wound healing by second intention healing
- Perform a non-sutured castration
- Repair of an eyelid laceration
- Apply a splint
- Perform regional limb perfusion
- Perform distal limb bandage
- Perform full limb bandage
- Cast application
- Cast removal
- Foot abscess management
- General surgery log (separate spreadsheet)

### **Internal medicine - Miscellaneous procedures**

- Perform a nasogastric intubation (adults, foals)
- Perform a rectal examination
- Perform IV injections and blood collection
- Perform arterial puncture and blood sampling
- Place iv catheters
- Set up fluid giving sets
- Set up fluid pumps
- Perform and comment a gastroscopy
- Perform a paracentesis (abdominocentesis)
- Perform a BAL
- Perform a TTW
- Perform ocular exam (incl. nerve blocks)
- Place a sub-palpebral lavage set
- Perform faecal egg counts
- Perform humane euthanasia