

EQUINE ROTATING INTERNSHIP

Equine Health & Performance Centre

School of Animal & Veterinary Sciences

Roseworthy Campus

Roseworthy

SA 5371

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 his capacity to identify and solve medical problems (within the disciplines of equine internal medicine, surgery, anaesthesia, reproduction and ambulatory services), his ability to work-up a case and his 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 (5 compulsory and 41 optional).
 - o 41 Optional credits are for clinical training (medicine, surgery, anaesthesiology, theriogenology, ambulatory services)
 - o 3 Compulsory credits are for seminar
 - o 2 Compulsory credits are special rotations (research, 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 52 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 his 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 his progress through the credits (in particular the optional 41 program credits = clinical rotation training) in his 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 he needs to acquire competences.

Continuing education:

- During his Internship, the Intern is encouraged to attend at least one CE meeting at a National or International level and ideally present his scholarly work. If he wants to participate to another CE meeting or workshop during the internship, the Intern needs to discuss this possibility with his 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 his **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 his 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 his capacity to fulfil his task safely and adequately. It is his responsibility and his right to manifest his 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.
- O 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, he 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 his cases, he 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 his 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 his 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.

- O 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.
- o Students are supposed to know how to perform a basic TPR but it is good to ensure they actually do.
- o Students must be stimulated to think about getting things set up for procedures.
- o Students must be instructed in how to run a PCV/TP/Lactate/Glucose
- o Students must be instructed in how to work the haematology machine.
- o Students must be instructed in dating newly opened bottles of drugs.
- o Students must be instructed to alert nurses to when drugs/patient labels are getting low.
- o 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...).
- o 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 advise 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 set up of the material that is most likely required (including input of patient details and connecting recording systems).
- 6) Participation to after-hours roster. The Intern is participating to the after-hours 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 7:30 am 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.

- Inform students
 - a. Make sure they know the plan for the day
 - 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.
- All tasks including treatments, placement of catheters and paperwork should be completed prior to the 8:30 am rounds.

Daytime expectations:

- Clinical checks/monitoring of all hospitalised patients of the rotation service but work as a team with the other Intern and help 1) each other out.
- Administration of medication to hospitalised patients
- Filling up request forms and submit samples to VDL
- Admission of the patients to hospital, taking history 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
- When in the respective rotation, assisting with theriogenology services
- When in the respective rotation, assisting with anaesthesiology
- When scheduled, assisting with primary opinion/ambulatory service
- Assisting in clinical teaching of students during rounds, surgery, student lectures, and regular clinical activity 9)
- 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:
 - Read and correct students record / SOP's at least twice a day and provide feedback to them.
 - 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
 - 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.)
 - Medical notes must be comprehensive but not monotonous and they need to be reviewed by the clinician in charge
 - For hospitalised patients, discharge instructions, reports and referral letters must be completed and transmitted to the Client Relation team before the patient goes home
 - Fill in hospital/treatment sheets for the following day when possible
 - Treatment sheets ensuring the correct treatment and instructions are on the treatment sheet and / or whiteboard.
 - 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)
 - 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): this makes the process of billing more efficient and accurate.

Personal Evaluation Grid

Name of the candidate: Option: Equine						
Program: Internship		Residency		option Equite		
	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