

European College of Veterinary Anaesthesia and Analgesia



Approval / Re-Approval as an APPROVED / SATELLITE ECVAAs training centre

APPROVED **SATELLITE**

FIRST APPLICATION

APPLICATION FOR RE-APPROVAL

Address and Location of the Training Centre:

Department of Small Animal Medicine
and Large Animal Clinic for Surgery
Veterinary Faculty, University of Leipzig
An den Tierkliniken 23
04103 Leipzig
Germany

I HEREBY CERTIFY that this Centre can (tick the relevant box):

APPROVED TRAINING CENTRE

provide a Standard Residency Training Programme (min 3 years) in Veterinary Anaesthesia complying with the requirements formulated by ECVAAs. (See: Policies and Procedures: Chapters 3 and 4, (IV) Specific requirements for (ii) and (iii) and (V) Facilities, services, and equipment)

SATELLITE TRAINING CENTRE

contribute to residency training for the following species (please specify) :

A detailed description of the Training programme accompanies my application and will be accessible via the ECVAAs website after approval.

The Centre Supervisor (Name in block capitals): Dr. MICHAELE ALEF

Leipzig, 13/08/2015

NB: (Re) Approval of a Centre for Standard Residencies is based on the information provided.

ANY CHANGES AFTER APPROVAL MUST BE NOTIFIED TO THE CREDENTIALS AND EDUCATION COMMITTEE.

Failure to do so in a timely manner may invalidate the Residency programme.

DETAILED DESCRIPTION OF THE RESIDENCY TRAINING PROGRAMME

(If this description accompanies an application for re-approval of an existing programme please highlight the differences with the formerly approved version including last approved changes)

1. RESIDENCY PROGRAMME IN ANAESTHESIA

How and where is/will be the detailed description of residency programme available to the public?

Following approval by the Credential and Education Committee of the ECVAA a detailed description of the residency programme will be available at the website of the ECVAA (section approved centres) and the homepage of the faculty (Veterinary Faculty, University of Leipzig).

1.1. OBJECTIVES OF THE ANAESTHESIA RESIDENCY TRAINING PROGRAMME.

The anaesthesia residency training programme will enable a veterinarian to undergo postgraduate training and become a specialist in veterinary anaesthesia.

After successful attendance of the residency programme, the resident will have the highest possible level of expertise in veterinary anaesthesia, critical care medicine and pain management.

Furthermore, the resident will have the skills to manage anaesthesia and intensive care in a wide variety of species. This will also include experience in wild animals, for which expertise in distance immobilization will be accomplished by participation in a specific certified course.

Due to own research projects and collaboration with other international research groups the candidate will be integrated into the scientific landscape of veterinary anaesthesia and contribute to an improvement of the anaesthetic management of different species. The expertise of the resident will be shown by publication of research results in peer-reviewed journals. Furthermore, the attendance at conferences for veterinary as well as human anaesthesia will be supported to achieve a maximum of exchange of knowledge. The resident will also improve his skill in teaching by participation in lessons for veterinary students, veterinarians and nurses. Following a period of 3-4 years after start of the anaesthesia residency training programme the resident will be prepared to sit the Diploma examination of the European College of Veterinary Anaesthesia and Analgesia.

1.2. DURATION

Specify. Is the beginning and effective duration of the Residency limited to a specific time frame? (E.g. related to later exam participation?) or flexible?

The beginning of the Residency is flexible and the programme will typically last for three years. If necessary a prolongation of the residency time for up to four years is allowed to meet all the requirements to sit the Diploma examination.

1.3. DIPLOMATES PARTICIPATING

a. Number and Names of active Diplomates (ECVAA and DACVA) actually presents at the site and participating in the programme. State if supervisors are assigned to particular residents

b. Estimation of % time (100% => +/- 40h/week, 45 weeks/y) of clinical activity of each of these Diplomates.

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c. Estimation of time (in h/week) dedicated for input to Resident training other than clinical supervision by each of these Diplomates.

#	Name	Diploma	Assigned resident	b.	c.
1	<i>Michaele Alef</i>	ECVAA		70	5
2	<i>Gerhard Oechtering (non practicing)</i>	ECVAA		40	<i>Depending on topic (not regularly), on request</i>

d. Number of Residents (standard / alternative) effective /foreseen in the next five year period.

1, decision about a 2nd resident depending on progress of 1st resident and an appropriate candidate

1.4 SUPPORTING NON DIPLOMATE EXPERTISE

Specify number and expertise level of non Diplomate staff with >5 years full time anaesthesia experience providing additional support to Residents in training (veterinarians, Certificate in Vet Anaesthesia holders, anaesthesia Technicians)

1 small animal anaesthetist (veterinarian) – completion of the “Fachtierärztin für Anästhesie” (certified national veterinary specialist in anaesthesia)

2 Small animal nurses (please not: until now there is now certification for veterinary technicians in the topic of anaesthesia in Germany)

Experienced human anaesthesiologists (head of department, hospital nurse; Department of Anaesthesiology, University of Leipzig)

Members of the research group AKEVA (research group of clinical and experimental veterinary anaesthesia)

Studies on a regular base (40 hours /month)

1.5. FOR STANDARD APPROVED CENTRE: SPECIFIC PROGRAMME DESCRIPTION (FOR SATELLITE TRAINING CENTRES, PLEASE GO DIRECTLY TO POINT 3.)

1.5.1. Schedule for the Resident demonstrating how requirements of the Residency will be met during the residency (SEE ECVAA POLICIES AND PROCEDURES, Chapter 4).

This schedule should be in terms of weeks/year (which may vary between years) and should demonstrate the *number of weeks* each year that the Resident is expected to spend in:

(i) **Anaesthesia clinical service**; small and large animal and including intensive care and/or emergency. (If the Resident is to spend ‘weeks’ in small or large, state the division; if the small and large animal services are not separated, please state this).

(ii) **Specify planned Rotations** (weeks, discipline) in other related clinical disciplines.

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(iii) **Specify planned External clinical anaesthesia rotations** (weeks, location), especially but not exclusively address training visits to Zoo's, Human Hospitals and Lab animal research facilities.

(iv) **Research** – time in which the Resident will perform and write- up the research project(s) for publication.

(v) **Other 'off clinics' time** – for study and for production of 2nd publication and/or for case reports.

(vi) **Vacation time.**

Demonstrate within this schedule the plans to ensure timely completion of the Research and publications so as meet the credentials requirements (especially deadlines for credentials submission and submission of a final acceptance letter).

The supervisor is employed at the Department for Small Animal Medicine. Due to the organisational structure of the Veterinary Faculty at the University of Leipzig and the short walking distance (less than 30 meters) between both departments (Large Animal Clinic for Surgery, Department of Small Animal Medicine) a supervision for Large Animal cases will take place without limitations. The supervision will consist of case discussions, preliminary discussions, consultations and personal supervision of cases during surgery, depending on the experience and the knowledge of the resident and on the specific cases.

The resident will be involved in clinical activities in small as well as in large animals. This will include working in theatre and the intensive care unit. Following training in routine day work in anaesthesia clinical service the candidate is expected to expand his experience and knowledge to emergencies and will therefore participate in night duties.

Furthermore, the resident will get in contact with human research groups, participating in this area of veterinary anaesthesia and analgesia. This could realised due to a close collaboration of different specialists in the topic of anaesthesia and analgesia of middle-sized laboratory animals (research group AKEVA, research group of clinical and experimental veterinary anaesthesia). The resident is also encouraged to do rotations in human medical hospital to get insights in human anaesthesia and analgesia.

Due to the small campus of the Veterinary Faculty at the University of Leipzig and the collaborations of the different departments the resident will be able to work up cases with various specialists from different facilities. Furthermore, rotations in related disciplines of veterinary anaesthesia are designated for a specific understanding of physiology and pathophysiology of certain conditions of small and large animals, as well as for the diagnostic work up of cases. Additionally, participation of courses or seminars with topics related to anaesthesia, analgesia or intensive care is highly recommended.

Specific research weeks are scheduled for the scientific project of the resident. This will include the design, performance and analysis of specific research topics related to veterinary anaesthesia and analgesia.

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In order to meet the requirements for the residency programme (case load of various species) and to gain insights in different facilities of veterinary anaesthesia and analgesia, the resident will also participate in clinical work (under supervision of a diplomate of ECVAA or ACVAA) in external institutions providing services in veterinary anaesthesia and analgesia.

A detailed schedule for each year is listed below.

Year	Weeks	Place
<i>1st</i>	<i>10</i>	<i>Small animal anaesthesia and ICU, including exotics and zoo animals as they come in</i>
	<i>22</i>	<i>Large animal anaesthesia and ICU, including farm animals (mainly research animals)</i>
	<i>2</i>	<i>Human medical hospital (University of Leipzig)</i>
	<i>10</i>	<i>Study time; Research weeks</i>
	<i>2</i>	<i>Conference (AVA), Workshops</i>
	<i>6</i>	<i>holiday</i>
	Tot: 52	On-clinics 32/46 weeks (70%); Off-clinics 14/46 weeks (30%)
<i>2nd</i>	<i>10</i>	<i>Small animal anaesthesia and IC, including exotics and zoo animals as they come in</i>
	<i>22</i>	<i>Large animal anaesthesia and ICU, including farm animals (mainly research animals)</i>
	<i>2</i>	<i>Diagnostic imaging</i>
	<i>10</i>	<i>Study time; Research weeks</i>
	<i>2</i>	<i>Conference (AVA), Workshops</i>
	<i>6</i>	<i>holiday</i>
	Tot: 52	On-clinics 32/46 weeks (70%); Off-clinics 14/46 weeks (30%)
<i>3rd</i>	<i>10</i>	<i>Small animal anaesthesia and ICU, including exotics and zoo animals as they come in</i>
	<i>20</i>	<i>Large animal anaesthesia and ICU, including farm animals (mainly research animals)</i>
	<i>2</i>	<i>Internal Medicine</i>
	<i>12</i>	<i>Research weeks</i>
	<i>2</i>	<i>Conference (AVA), Workshops</i>
	<i>6</i>	<i>holiday</i>
	Tot: 52	On-clinics 30/46 weeks (65%); Off-clinics 16/46 weeks (35%)
Total: 3 years	156	Species: Small animals 30/94 weeks (32%); Large animals 64/94 weeks (68%)

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The schedule above represents the guideline for the residency programme. However, depending on language, previous experience of the resident, actual case loads and requirements of the respective department, the actual time table will vary between different residents.

1.5.2. Teaching responsibilities of the Resident (in relation to anaesthesia, analgesia or intensive care).

Specify the audience, the nature (hands-on, seminar, frontal lecturing) and the estimated time spent with these activities pro residency year

The resident has to perform students training (hands-on) during their clinical activity (2-4 h/week), course work (seminar) for practical clinical anaesthesia (7 h/year) and lectures in the core anaesthesia course beginning at the end of the first year (7-14 h/year). Teaching of veterinarians working at the respective departments will be provided by the resident regularly (4 h/year).

1.5.3. Continuing Professional Development CPD.

This should include

(i) **Internal CPD in anaesthesia:** frequency of resident seminars/ journal clubs, 'rounds' etc. at which the Resident is expected to attend and frequency of expected presentation at such meetings.

Book reading: attend and present, weekly

Journal club: attend and present, weekly

Case discussion rounds: attend and present, weekly

Mortality and morbidity conference: attend and present, every 8 weeks

(ii) **Internal CPD in other areas – clinical and research.** Include any CPD organized for residents in all areas (e.g., statistics courses). Indicate frequency of such meetings and the input (e.g. presenting) expected from the Resident.

Equine Surgery - Journal club: attend and present, weekly (approved by the ATF = "Akademie für tierärztliche Fortbildung", national certification of continuing education in veterinary medicine)

Physiology – Book reading, attend and present, biweekly

Meeting of human anaesthesiologists (research group AKEVA) – attend and present, monthly

(iii) **External CPD and conferences, including AVA meetings with their associated training days.**

Again indicate the expected attendance of the Resident, and indicate at what stage of their training they will be expected to present to such a meeting.

The resident is expected to participate regularly in conferences and meetings covering the topic of veterinary anaesthesia and analgesia, human anaesthesia as well as intensive care.

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The attendance at one AVA/ECVAA meeting per year, including the resident training days, is highly recommended. A presentation at one of these meetings should at least take place once in the period of the residency time.

Describe how the material presented and discussed during CPD remains retrievable and at the disposal of the resident

Topics of the CPD seminars or rounds as well as papers for discussions will be emailed by the respective presenter, given by the presenter as power-point presentation or is included in book chapters (available at the faculty library). A schedule will be given to each participant to inform about dates and topics of the presentations.

(iv) Specify if it is compulsory for residents to enroll in specific discipline related discussion lists, cpd providing websites

Enrolment of the resident in the ACVA discussion list will be advised.

1.5.4. Anaesthetic case records and ICU records: an example of the case-record (or records) which the Resident will use and will present for acceptance of credentials must obligatory accompany this application (at least as pdf document). If a form of supporting electronic case recording is contemplated (full electronic recording will not suffice) provide a detailed description and printed examples

Included at the end of the document

1.5.5. Any other course work. State what other 'course work' is expected of the Resident. In particular state if the Resident is also registered for a higher degree, (e.g. .Masters,) and if so, explain what requirements further to those already part of the Residency this will entail and how these may affect clinical training.

During the time of the residency an enrolment in a programme of a doctor of veterinary medicine degree or any other specifications (for example: "Fachtierarzt" – national veterinary specialist in a certain discipline) will not be recommended to perform simultaneously with the residency programme due to the limited time for clinical training. However, if the resident has participated successfully in a special qualification programme before the start of the residency, the termination of the programme or the exams can be completed in the time of non-clinical activity.

Occasional studies or course work of general research topics (i.e. scientific writing, professional supervision) can be taken by the resident to support the objectives of the residency programme, to improve the academic writing and reporting and to enhance university-level teaching and learning.

1.5.6. Provision to compensate for deficiencies in the programme - e.g. lack of certain species – see facilities below). Demonstrate how these deficiencies are to be met (e.g. external rotations). Please consider that for residents following a standard residency programme, no more than 60 anaesthetic

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records from institutions other than the one where the resident is mainly based can be used in the logbook submitted to the Credentials and Education Committee.

External rotations in other institution providing anaesthesia and analgesia of a variety of different species can be organised during the time of the residency, depending on the actual case load (presumably necessary for clinical cases in farm animals and exotics). To enable a high level of education, the external rotations in clinical veterinary anaesthesia will be performed under supervision of a diplomate of the ECVAA/ACVAA, working in the respective facility.

Besides the requirement for the logbook, external visits in other institutions and departments of veterinary anaesthesia, including other universities and private practice, are highly recommended to get insights into different work and structure.

1.5.7. Evaluation of Resident's performance. Describe the system used for assessment of the Resident's progress and performance; how often it is performed and by whom.

Meetings of the resident and the supervisor will take place twice yearly to evaluation performance and progress of the resident for clinical and scientific performance.

The resident will meet with his supervisor twice yearly for performance and progress regarding the clinical and scientific work as well as the required cases. An annual supervisor form will be completed once a year as required by the Credentials and Education Committee. A feed-back about the programme, working environment, research topics and related matters will be provided by the resident. The ECVAA training tool will be checked regularly for minor respected topics or not-realised tasks to be included in the activity of the resident and performance in the future.

2. FOR STANDARD APPROVED CENTRE: OTHER SPECIFIC or ADMINISTRATIVE ASPECTS (FOR SATELLITE TRAINING CENTRES, PLEASE GO DIRECTLY TO POINT 3.)

None

3. FACILITIES, SERVICES AND EQUIPMENT OF THE TRAINING CENTRE (FOR STANDARD APPROVED AND FOR SATELLITE TRAINING CENTRES)

3.1 Are the following *minimal* requirements met?

Medical library: a library containing recent textbooks and current journals relating to veterinary and medical anaesthesia and its supporting disciplines must be accessible to the programme participants; there must be full access to internet: Y N

Medical records: a complete medical and anaesthetic record must be maintained for each individual case and those records must be retrievable. The anaesthetic and intensive care record used must be approved by the credential and educational committee: Y N

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Full surgical and anaesthetic facilities must be available to the candidate, including breathing systems, compressed gases, a range of monitors and facilities for post-operative and intensive care. Facilities must be available for a wide range of surgical procedures and species: Y N

Radiographic services: separate rooms and appropriate equipment for comprehensive diagnostic imaging must be available: Y N

Cardiology: at least ECG facilities must be available. Cardiac ultrasound is also desirable: Y N

A clinical pathology laboratory for hematological and clinical chemistry, including blood gas analysis, must be available. Clinical pathology reports must be retained and retrievable: Y N

3.2 Details concerning the facilities, services and equipment:

3.2.1 **Buildings** – i.e. numbers of operating theatres/consulting rooms / examination facilities/housing for small and large animals. Full descriptions are not required.

The Veterinary faculty of the University of Leipzig consists of different departments located on a small campus in Leipzig. The buildings of the Department of Small Animal Medicine (director: Prof. Oechtering) and the Large Animal Clinic for Surgery (director: Prof. Brehm) are located side by side (approximately 30 meters distance).

Both departments provide the necessary equipment to perform anaesthesia, perioperative care and analgesia in large and small animals on a high level.

Furthermore, the Large Animal Clinic for Surgery consists of a special theatre and housing for middle-sized research animals. Due to a close collaboration with other departments and human anaesthesiologists (research group AKEVA) a widespread education of the resident in many topics in veterinary anaesthesia and analgesia can be offered.

Large Animal Clinic for Surgery

- *examination hall, outdoor examination yards for lameness examination*
- *stock for rectal and ultrasound examination, dental procedures*
- *2 paddocks with sand, 1 paddock with gras*
- *scale for large animals*
- *surgery theatres*
 - *1 surgery theatre for horses*
 - *1 surgery theatre for middle-sized research animals*
 - *1 mainly for surgical procedures in combination with a computertomographic examination*
- *2 induction/recovery boxes*

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- *stables with 26 boxes for horses (7 outside) - including several boxes equipped to meet special requirements:*
 - *5 boxes in intensive care unit*
 - *2 boxes with equipment for sling systems*
 - *2 boxes to decay radiation following scintigraphic examination*
- *stables for middle-sized research animals (8 boxes)*

Department of Small Animal Surgery

- *Operation area:*
 - *Preparation room with 3 places*
 - *Meeting room*
 - *2 double operation theatres, 1 single operation theatre*
 - *1 operation theatre for ear-nose-throat surgeries*
 - *1 operation theatre for eye surgery*
 - *2 recovery rooms next to preparation room (dogs, cats, pet animals)*
- *Room for teeth procedures*
- *Sterilisation*
- *Intensive care unit:*
 - *Treatment tables*
 - *Separate places/boxes (13) for dogs, cats and pet animals*
- *1 room for cardiology*
- *1 room for endoscopy*
- *1 room for neurology*
- *1 room for dermatology*
- *1 room for oncology*
- *1 room for ophthalmology*
- *Consultation rooms (5), waiting room*
- *1 emergency room*
- *Radiology (2)*

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- *Ultrasound*
- *CT*
- *MRI*
- *Pharmacy*
- *Laboratory (3)*
- *Blood bank*
- *Several meeting rooms*
- *offices*
- *Stables:*
 - *Dogs (42)*
 - *Cats (20)*
 - *Pet animals (10)*
- *2 isolation stables including treatment table*
 - *Including 19 boxes*

3.2.2 **Overall Case-load.** – Overall approximate annual case-load admitted to the hospital in each species.

Large Animal Clinic for Surgery (approximate annual case-load calculated on the data from 2010-2014)

- *650-700 cases per year (horses)*
 - *Including 200-250 emergencies (colic horses, wounds, fractures)*
- *farm animals:*
 - *clinical cases: 5 farm animals per year*
 - *research animals: 10-20 farm animals per year*

Department of Small Animal Surgery (approximate annual case-load calculated on the data from 2014)

- *ca. 9100 dogs, 3300 cats, 400 pet animals*

3.2.3 **Anaesthetic case-load.** Approximate annual number of each species anaesthetized per year. Please indicate the type of cases that are presented and the number of cases anaesthetized out of

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hours. Numbers may include an ambulatory clinic where relevant (e.g. cattle practice), as long as the Resident will have access to such cases

Large Animal Clinic for Surgery

- *300-350 horses per year (out of hours: 100-120)*
 - *Type of procedure: orthopaedic (including fractures), urogenital, ear-nose-throat, dentistry, tumor, wound repair, colic surgery, diagnostic imaging, abdominal surgery, thoracoscopy*
- *10-20 farm animals per year*
 - *Type of procedure: neurology, lung, diagnostic imaging, oesophagus*

Department of Small Animal Surgery

2100 cases (out of hours: 500-700)

- *Type of procedure: soft tissue, orthopaedic, neurologic, ophthalmologic, diagnostic imaging oncology, dentistry, urogenital, abdominal surgery, etc.*

3.2.4. **Anaesthetic and monitoring and measuring equipment available** (numbers, type).

Large Animal Clinic for Surgery

Anaesthesia machines and ventilators

- *2 Large animal anaesthesia circle systems:*
 - *Matrx (Midmark)*
 - *Medec (BDO Medipass)*
- *1 Large Animal Respirator:*
 - *Smith Respirator LA 2100*
- *4 Anaesthesia circle systems (foals and farm animals) with respirator:*
 - *Medimorph*
 - *Datex-Ohmeda Aestiva 5*
 - *Datex-Ohmeda Excel 210*
 - *Dräger Sulla 808*

4 Vaporizer (Isofluran)

- *Dräger Vapor 19.3*

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- *Ohmeda Isotec 4*
- *Ohmeda Isotec 5*

Multiparameter monitors

- *1 Advisor Vital Signs Monitor (EKG, non-invasive and invasive BP, SpO₂, temperature, capnography)*
- *1 Capnography Monitor Surgivet V9004 Series (Capnography, SpO₂)*
- *1 Datex- Capnomac Ultima (Capnography, insp-exp O₂, anaesthetic gases, spirometry)*
- *1 Critikon Dinamap Plus multiparametric monitor (EKG, non-invasive and invasive BP, SpO₂, temperature)*
- *1 Datex Ohmeda AS/3 (EKG, SpO₂, capnography, temperature, anaesthetic gases, spirometry)*

Other equipment

- *2 syringe pumps (Perfusor fm Braun, Injectomat 2000 Fresenius)*
- *4 infusion pumps (Infusomat fm Braun, IP 2000-v Döring)*
- *1 oxygen concentrator (Oxymat 3)*
- *1 blood gas analysers (Radiometer)*
- *2 point-of-care analysers*
 - *blood gas analyser (EPOC Axonlab)*
 - *haematocrit analyser (DiaSpect Medical)*

Equipment research animals

Ventilator

- *Evita XL (Dräger)*

Multiparameter monitors

- *LiMON Pulsion Monitor (heart rate, SpO₂, ICG-elimination)*
- *PiCCO Pulsion Monitor (heart rate, temperature, CCO, haemodynamics)*

Other equipment

- *Lungmonitoring (EIT): Pulmo Vista (Dräger)*

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- 2 syringe pumps (*Perfusor fm Braun*)
- 1 infusion pump (*Infusomat fm Braun*)
- 1 blood gas analysers (*Radiometer, ABL 725*)

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Anaesthesia machines and ventilators

- 10 *Datex-Ohmeda Cirrus Trans/vent II*
- 1 *Datex-Ohmeda Aestiva/5 MRI*
- 1 *Dameca Siesta*
- 6 *Datex-Ohmeda Aespire View*
- 1 *Jetventilator (Acutronic)*
- 1 *Stephan Respirator AVB-U + circle system + oxygen concentrator*

Vaporizer

- 11 *Ohmeda Isotec 5*
- 2 *Ohmeda Isotec 4*
- 1 *Dräger Vapor 2000*
- 1 *Dräger Vapor 19.3*
- 1 *Blease Vaporizer*

Multiparameter monitors

- 9 *Datex Ohmeda AS/3 (EKG, SpO2, capnography, temperature, anaesthetic gases, NIBP)*
- 1 *Datex Ohmeda F-FM 00 (EKG, SpO2, NIBP, temperature)*
- 6 *GE Carescape B450 (EKG, SpO2, capnography, blood pressure, temperature, anaesthetic gases, spirometry)*
- 2 *GE Carescape B40 (EKG, SpO2, capnography, blood pressure, temperature)*
- 2 *Datex Ohmeda S5 Compact (ECG, NIBP, invasive BP, pulse oximetry, respiration, temperature)*

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- 1 Datex Ohmeda S5 Light (ECG, NIBP, invasive BP, pulse oximetry, respiration, temperature)
- 1 Datex Ohmeda Cardiocap (ECG, SpO2, blood pressure, temperature)
- 1 Critikon Dinamap Veterinary Monitor (pulse rate, blood pressure, temperature)

Other equipment

- Defibrillator (Physio control)
- syringe pumps (Perfusor fm Braun)
- infusion pumps (Infusomat fm Braun, Infusomat SpaceP Braun)
- Doppler (Vet BP, 811-B)
- Telemetric ECG & Holter (Televet)
- EEG (Nicolet Bravo NT)
- EMG/Evoked Potentials/Neurography (Medtronic, Keypoint portable)
- Endoscopy (Storz, Fujifilm)
- Bair Hugger (model 750, 3M)
- Fluid aspirator (Venta Muli 26, Medap)
- Thermal life-support cabinet (Vetario TM)
- Point-of-care analyzers and blood gas analysis
- Scale for small animals

3.2.5. Diagnostic Imaging equipment available.

Large Animal Clinic for Surgery

Radiographic equipment

- Stationary X-ray System: Polydorus 100A Siemens
- Portable X-ray System Gierrh TR 1930
- mobile C-arm system: BV 300 Philipps
- CR: Fuji FX 5000 digital X-Ray

Ultrasonographic equipment

- GE Logic 5 ultrasound scanner (transcutaneous, rectal probes)
- Esaote ultrasound scanner, laparoscopic probe

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CT equipment

- CT MX 8000 IDT Philipps, helical 16 slice

MRI equipment

- 0.3 T Hallmarq Equine Limb Scanner
- 0.5 T Philips Gyroscan T5-NT (located in small animal clinic)

Digital environment

- PACS (Patient Archiving and Communication System) Curasystems
- RIS (Radiology Information System): availability of Vetera.net (HIS)
- DICOM-connection between Vetera (HIS) and the radiography-units (CR as well as MRI-unit, CT and sonography-unit (wireless to sonography) via Cura server
- 15 workstations and 4 workplaces with double monitors for analysis and appraisal
- burning robot for CD and DVD

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radiographic equipment

- x-ray unit Philips Digital Diagnost
- x-ray fluoroscopy unit Philips Omnidagnost with linear tomography, digital fluoroscopy (including DSA)/generator: 80 kW
- mobile units: mobile C-arm system Philips BV Endura

mobile C-arm system Philips BV-300 (angiography option)

- intra-oral X-ray system (Gendex 765 DS)
- storage-phosphor system Philips AC 500 / FUJI ST-V, HR (CR)
- digital archive: iSite Enterprise (radiography, MRI, CT, film-scanner)
- digital film distribution of DICOM formats with viewers (e-film, MICORA)
- film-scanner codonics
- pressure injector for angiography MedTron Injectron 82

sonographic equipment

- GE Logiq P6
- GE Vivid E9 (cardiovascular)

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- *digital archive: PACS, soft copy distribution (SonoWin)*
- *video-documentation, multiformatted camera and videoprinters for hard copies*

CT equipment

- *helical multislice CT Philips Mx8000 Brilliance (6-slice configuration) with original patient support for the examination of companion animals*

(including pressure injector for angiography MedTron Injectron 82)

MRI equipment

- *closed MRI-system Philips Ingenia (3 Tesla) with original patient support for the examination of companion animals and custom build table to allow examination of large animals*

3.2.6. Nuclear medicine services.

Department of Large Animal Surgery

- *single head nuclear gamma camera, FOV 610x400mm, LEAP collimator; MIE Germany*
- *Diagnostic nuclear medicine laboratory, Tc-99m generator ordered on demand*

3.2.7. Other Services available with prominent involvement of residents and supervisors?

The Large Animal Clinic for Surgery houses facilities for surgeries of middle-sized research animals. Therefore, an involvement of the resident in the work of the research group (post-operative care, anaesthesia, pain management) is highly encouraged.

3.2.3. **Facilities for intensive care** – is there a specific intensive care unit or does anaesthesia take this responsibility? Case load?

Both departments include an intensive care unit, in which patients are closely monitored, controlled and treated. The ICU are under the direction of experienced critical care and emergency veterinarians (non-board certified), and the anaesthetists are also involved for case discussions, advises and consultations. Therefore, the resident will be responsible for patients at the ICU.

Pain Clinic? Case Load?

There is no specific pain clinic for small or large animals. However, patients with severe pain are under supervision of the ICU or the anaesthetists.

European College of Veterinary Anaesthesia and Analgesia

3.2.8. List of Diplomates in other specialties who may contribute directly or indirectly to the Residents' education.

Prof. Dr. Walter Brehm, Diplomate ECVS

Dr. Uta Delling, Diplomate ACVS/ECVS

PD Dr. Kerstin Gerlach, Diplomate ECVDI

Dr. Dagmar Berner, Resident ECVI (final year)

PD Dr. Eberhard Ludewig, Diplomate ECVDI

PD Dr. Peter Böttcher, Diplomate ECVS

PD Dr. Thomas Flegel, Diplomate ECVN/ACVIM (neurology)

Dr. Irene Böttcher, Diplomate ECVN

To be filled soon, Diplomate ECVIM

3.2.9. FOR SATELLITE CENTRES: Please state how the centre will contribute to residency training

.....

Place and Date :

Centre Supervisor:(Name and signature)

Leipzig, 13/08/15



Prof. Dr. Michaele Alef

Nota bene: An example of the case-record (or records) for anaesthesia and intensive care which the Resident will use and will present for acceptance of credentials **must** accompany this application (at least as pdf document). If you send an empty sample, please also provide a scanned copy of a clinical case requiring ventilation.