1. **Overview**

This Small Animal Emergency and Critical Care residency program has been designed to provide in-depth training in Small Animal Emergency and Critical Care and related basic and applied sciences. The program has been developed to provide residents with a comprehensive knowledge of emergency medicine and management of cases with complex critical conditions affecting animals. Our program strives to prepare residents for active careers in academia or specialty practice, and the caseload provides an excellent and broad experience over the duration of the residency. The residency will fulfill the training requirements and partially fulfill the requirements for certification by the American College of Veterinary Emergency and Critical Care (ACVECC).

The primary mentors of the training program are Dr. April Blong, DACVECC, and Rebecca Walton, DACVECC with the assistance of the entire faculty of the Department of Veterinary Clinical Sciences (VCS).

Clinical facilities of the Hixson-Lied Small Animal Hospital and Dr. W. Eugene and Linda Lloyd Veterinary Medical Center (LVMC) will be the primary training location for the Iowa State University (ISU) portion of the residency.

2. **Objectives**

2.1 To provide advanced training in clinical problem solving and diagnostic and therapeutic techniques in the specialty field.

2.1.1 To become familiar with diseases afflicting veterinary patients and to be able to logically correlate all clinical data in order to formulate and execute correct treatment plans.

2.1.2 To provide a firm understanding of the underlying pathophysiological basis of disease.

2.1.3 To master the art and science of complete patient care, assess outcomes and to appreciate the economic and emotional factors involved in the health care of animals.

2.1.4 To develop the art of interpersonal communications for proper colleague and client relationships.

2.2 To provide didactic and tutorial teaching training and experience.
2.3 To satisfy the requirements for specialty college examination.

2.4 To provide experience in scientific and clinical case presentation through the seminar and house officer rounds program.

2.5 To provide experience in the preparation and submission of scientific articles for publication and/or presentation.

3. **Prerequisites**

3.1 Candidates must have a DVM or an equivalent degree.

3.2 Candidates must have satisfactorily completed at least a one year rotating Internship or its equivalent post graduate veterinary experience.

3.3 Candidates must have successfully completed the National Board examination or its equivalent in the certifying country; must be approved to practice veterinary medicine in the United States.

3.4 Candidates must be/become licensed to practice veterinary medicine in the state of Iowa prior to employment.

3.5 Candidates must have the goal of specialty board certification.

3.6 Candidates must have a satisfactory moral and ethical standing.

4. **Faculty Advisor**

4.1 The resident will be assigned to a faculty advisor (mentor) in the first month of the program. This may be the same or a different person than the Program Director.

4.2 Responsibilities of the advisor/mentor include:

   4.2.1 The advisor will directly oversee the resident’s training and act as a liaison with other faculty members in the College of Veterinary Medicine.

   4.2.2 Direction and coordination of the clinical program.

   4.2.3 Advice toward research, publications, and preparation for specialty board application.

   4.2.4 Approval of requests by faculty for the resident to participate in teaching, research or other activities.
4.2.5 Advising on preparation and reviewing presentation performance of seminars and case rounds.

4.2.6 Professional guidance.

5. **House Officer Presentations & Rounds Programs**

The LVMC offers House Officers several educational opportunities to enrich their training programs and obtain teaching experience. Some of these opportunities are in collaboration with other departments within the College. The menu of rounds and seminars is tailored to assist House Officers in literature review and board preparation and to expose them to a broad range of clinical and academic experiences. The weekly LVMC Seminar/Case Presentation Program requires attendance and participation by all House Officers while participation in other rounds is program dependent.

5.1 The **LVMC House Officer Seminar/Case Presentations Program** is designed to provide House Officers the opportunity to receive and present interesting, unusual, or difficult clinical material utilizing a problem oriented approach to professional colleagues and to develop manuscripts for publication.

5.1.1 All House Officers will participate and give presentations on a rotating basis. These presentations are scheduled by the Resident responsible for coordinating these presentations.

5.1.1.1 All presentation topics are to be approved by the House Officer’s advisor **1 month** prior to the scheduled presentation.

5.1.1.2 All presentations are to be reviewed by the advisor or appropriate topic mentor **1 week** prior to the presentation to allow the House Officer time to make the recommended modifications.

5.1.2 House Officer attendance is required at all sessions. Attendance will be taken at the beginning of each session.

5.1.2.1 Notify the Chair of the House Officer Committee when an absence is anticipated (due to vacation or out-rotations and when due to illness).

5.1.2.2 Excused absences include the following: illness, annual leave, attendance or participation in a continuing education program, presentation of a lecture, scheduled out-rotation or special service requirement per request of the advisor. All other absences are unexcused unless deemed excusable by the House Officer Advisor.
5.1.3 House Officers will be required to present an additional seminar if they have more than one unexcused absence during a program year.

5.1.4 **LVMC House Officer Case Presentations** are designed to provide House Officers the opportunity to receive and present interesting, unusual, or difficult clinical case material utilizing a problem oriented approach to professional colleagues and to develop manuscripts for publication.

5.1.4.1 All House Officers will deliver a minimum of one case presentation each year of their program.

5.1.4.2 Case selection should be approved by the House Officer’s advisor or mentor well in advance of the presentation.

5.1.4.3 Case presentations should utilize the problem oriented approach, have good follow-up, include a discussion of the pertinent current literature and take approximately 15 minutes to present with an additional 5 minutes for discussion.

5.1.4.4 Members of the audience will complete evaluation forms giving comments on the quality of the presentation with suggestions for improvement. *(See appendix F)*

5.1.5 **LVMC House Officer Seminars** are designed to provide House Officers with the opportunity to research and present scientific information and then discuss the topic with professional colleagues.

5.1.5.1 A minimum of one seminar will be prepared and given by each House Officer in each year of their program. Some programs require two seminar presentations each year *(see section 8 for specific program requirements)*.

5.1.5.2 Topic selection should be focused and approved by the House Officer’s advisor at least one month in advance of the scheduled presentation date and prior to performing an in-depth literature search.

5.1.5.2.1 Topics might include a literature search in preparation for writing a research grant.

5.1.5.2.2 The presentation may be the results of a research project.

5.1.5.2.3 The topic might be an area of interest or one which will improve your expertise and understanding.
5.1.5.3 Seminar presentations of approximately 40 minutes are expected with an additional 10 minutes available for discussion.

5.1.5.4 Members of the audience will complete evaluation forms giving comments on the quality of the presentation with suggestions for improvement. (See appendix G)

5.2 Seminar/Rounds Schedule and participation requirement:

<table>
<thead>
<tr>
<th><strong>Type:</strong></th>
<th><strong>Frequency:</strong></th>
<th><strong>Commitment:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>LVMC HO Seminar/Case Presentation</td>
<td>weekly (Thursday 8 a.m.)</td>
<td>required</td>
</tr>
<tr>
<td>ECC Service Resident Rounds</td>
<td>1-2 times weekly per program</td>
<td>required</td>
</tr>
<tr>
<td>Service Rounds w/students</td>
<td>monthly (Tuesday 8 a.m.)</td>
<td>required</td>
</tr>
<tr>
<td>Radiology-Pathology Rounds</td>
<td>monthly (Tuesday 8 a.m.)</td>
<td>optional</td>
</tr>
<tr>
<td>Morbidity/Mortality Rounds</td>
<td>monthly</td>
<td>optional</td>
</tr>
<tr>
<td>ECG Rounds</td>
<td></td>
<td>recommended</td>
</tr>
<tr>
<td>Student Grand Rounds</td>
<td>weekly (Friday 8 a.m.)</td>
<td>optional</td>
</tr>
<tr>
<td>Journal Club</td>
<td>weekly</td>
<td>optional</td>
</tr>
<tr>
<td>Textbook Review Session</td>
<td>weekly</td>
<td>optional</td>
</tr>
<tr>
<td>Anatomic Pathology Rounds</td>
<td>weekly</td>
<td>optional</td>
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</tbody>
</table>

5.2.1 ECC Service rounds are composed of weekly (50 wks/year) resident topic rounds. The topic of these rounds will rotate on a three year schedule in proportion to the expected representation on the ACVECC certifying exam. Categories include but are not limited to: cardiovascular, respiratory, renal/urinary, endocrine, gastrointestinal, hepatobiliary, neurology/special senses, reproductive, musculoskeletal, immunologic/hemolymphatics, integument, sepsis/SIRS/MODS, shock/ischemia/CPR, coagulation/transfusion medicine, acid-base/fluid, anesthesia/analgesia, nutrition and environmental and toxicities. Focus in each category will include physiology, pathophysiology, diagnostics, monitoring and interventions.

5.2.2 During approximately 75% of the year, there will be a second weekly rounds session that rotates between: ECC literature review, ECC journal club, ECC morbidity and mortality rounds, ventilator lab, and mock exam.

5.2.2.1 ECC literature review will involve each service member being assigned one or more ACVECC required/recommended journals and presenting a brief summary of relevant literature from that source.

5.2.2.2 ECC journal club will be assigned to service members on a rotating basis. The presenter for that session will provide an in-depth review
and critical evaluation of a single prominent ECC related journal article. They will also lead group discussion.

5.2.2.3 ECC morbidity and mortality rounds will be assigned to service members on a rotating basis. The presenter for that session will provide an in-depth case review/summary for a single complex or difficult case from the ICU. They will also perform a relevant literature search and present current literature regarding some aspect of the case and lead a group discussion relevant to the case.

5.2.2.4 Ventilator lab will involve all service members. Skills practiced/discussed will include ventilator set-up, waveform analysis, and trouble shooting. This may be hands-on dry lab, didactic, or case-based in nature.

5.2.2.5 Mock exam sessions will involve each service member preparing a small set of questions (typically 5-7 multiple choice) regarding a set of assigned topics from recent resident rounds content. Exam questions are expected to be high-quality and meet format and criteria requirements set forth by ACVECC for candidate-submitted certifying exam questions. A minimum of two references from the ACVECC approved knowledge base list (one if it is a question relating to a specific journal article) are required to support each question.

6. Teaching Program

6.1 Throughout the program residents will be viewed as role models by both Residents and professional students. They should always present themselves in a professional manner.

6.2 The resident will participate in clinical instruction and evaluation of veterinary students assigned to clinics.

6.3 The resident will participate in preclinical didactic lecture and laboratory instruction as assigned by his/her advisor.

7. Board Certification

7.1 An important credential in veterinary medicine is board certification in a specialty area. One of the objectives of the program is to prepare the resident for certification by the American College of Veterinary Emergency and Critical Care.
7.2 In order to qualify for examination, the resident should refer to the published requirements of the college.

7.3 It is solely the responsibility of the resident to submit any material and fees required by the specialty college for registration, credentials application, or board examinations. http://acvecc.org/welcome.php

8. Clinical Program

Below is a description of the 52 weeks per year of training.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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</thead>
<tbody>
<tr>
<td>26 weeks ECC immersion</td>
<td>26 weeks ECC immersion</td>
<td>26 weeks ECC immersion</td>
</tr>
<tr>
<td>14 weeks independent</td>
<td>13 weeks independent</td>
<td>16 weeks independent</td>
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<tr>
<td>study/practice</td>
<td>study/practice</td>
<td>study/practice</td>
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<tr>
<td>Required Rotations:</td>
<td>Required Rotations:</td>
<td>Required Rotations:</td>
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<tr>
<td>2 wk Internal medicine</td>
<td>2 wk Internal medicine</td>
<td>2 wk Internal medicine</td>
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<tr>
<td>2 wk SA Surgery</td>
<td>2 wk SA Surgery</td>
<td>2 wk SA surgery (or</td>
</tr>
<tr>
<td>2 wk Anesthesia</td>
<td>2 wk Radiology</td>
<td>human ER/ICU)</td>
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<tr>
<td>2 wk Cardiology</td>
<td>3 wk Neurology</td>
<td>2 wk Ophthalmology</td>
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<tr>
<td>2 wk Elective</td>
<td>2 wk Elective</td>
<td>2 wk Elective</td>
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<tr>
<td>2 wks vacation</td>
<td>2 wks vacation</td>
<td>2 wks vacation</td>
</tr>
</tbody>
</table>

8.1 Year I Resident's Program

8.1.1 Weeks of training described in table above.

8.1.2 The residents will participate in the instruction of clinical students and interns. In order to meet ACVECC requirements, the resident will participate in the instruction of skills laboratories for interns and students (minimum of 2 hours per year).

8.1.3 The resident will participate in house officer rounds, ward rounds, journal club, special topic conferences, seminars, and other scheduled conferences
of the LVMC. He/She will attend other scheduled seminars in the CVM as time permits.

8.1.4 The resident will present 1 seminars and 1 case presentation (to faculty and house officers) on topics of interest to the resident during LVMC House Officer Seminar/Case Presentation sessions.

8.1.5 The resident will present a minimum of 1 lecture per year in the Small Animal Emergency and Critical Care course and/or Intern rounds as assigned by the ECC faculty.

8.1.6 The resident will present 2 lectures per year in ECC resident topic rounds. This lecture will be on a single topic at a level appropriate for presentation fellow ACVECC residents and diplomats.

8.1.7 The resident will be the primary presenter during 2 ECC journal club rounds sessions and 2 ECC morbidity and mortality rounds sessions per year.

8.1.8 The resident will be responsible for preparing questions, as per ACVECC guidelines, on assigned topics for mock exam sessions.

8.1.9 The resident must complete ACVECC training benchmarks for review by their advisor by December 20th and June 20th.

8.1.10 The resident may attend a major professional meeting during the first year of their program with the advice and approval of his/her faculty advisor and the house officer committee. Unless presenting, the first year resident will not be able to attend the International Veterinary Emergency and Critical Care Symposium (IVECCS). Expenses will be paid by the resident. The meeting must be scheduled during a non-clinical block.

8.1.11 The resident is encouraged to attend and participate in continuing education meetings sponsored by the CVM or by local and regional veterinary organizations.

8.1.12 The resident must register with the specialty college no later than August 1st of the year their residency starts and follow their requirements. http://acvecc.org/blog/residency-forms/

8.1.12.1 Weeks of service and seminars must be logged as per ACVECC guidelines via the Residency Training Database by September 1st of each year of the program. http://rtip.acvecc.org/)
8.1.13 The resident is expected to familiarize themselves with (literature review) and finish data collection for an ongoing research study within the section.

8.1.14 The resident may, with the approval of the resident's advisor and the faculty, participate in clinically relevant graduate courses. Course work must not interfere with the clinical and instructional responsibilities of the resident.

8.2 **Year II Resident's Program**

8.2.1 Weeks of training described in table above.

8.2.2 The resident will submit a manuscript suitable for publication in an ACVECC approved journal from their research study to their advisor by March 1 of the second year of their program.

8.2.3 Following submission of their manuscript, the resident will design, obtain funding for, and begin an original research study of their own.

8.2.4 The residents will participate in the instruction of clinical students and Residents. In order to meet ACVECC requirements, the resident will participate in the instruction of skills laboratories for Residents and students (minimum of 2 hours per year).

8.2.5 The resident will participate in house officer rounds, ward rounds, journal club, special topic conferences, seminars, and other scheduled conferences of the LVMC. He/She will attend other scheduled seminars in the CVM as time permits.

8.2.6 The resident will present 1 seminar and 1 case presentation (to faculty and house officers) on topics of interest to the resident during LVMC House Officer Seminar/Case Presentation sessions.

8.2.7 The resident will present a minimum of 1 lecture per year in the Small Animal Emergency and Critical Care course and/or Resident rounds as assigned by the ECC faculty.

8.2.8 The resident will present 2 lectures per year in ECC resident topic rounds. This lecture will be on a single topic at a level appropriate for presentation fellow ACVECC residents and diplomats.

8.2.9 The resident will be the primary presenter during 2 ECC journal club rounds sessions and 2 ECC morbidity and mortality rounds sessions per year.
8.2.10 The resident will be responsible for preparing questions, as per ACVECC guidelines, on assigned topics for mock exam sessions.

8.2.11 The resident must complete ACVECC training benchmarks for review by their advisor by December 20th and June 20th.

8.2.12 The resident is expected to attend the IVECCS. Expenses will be paid by the resident. The meeting must be scheduled during a non-clinical block.

8.2.13 Weeks of service and seminars must be logged as per ACVECC guidelines via the Residency Training Database by September 1st of each year of the program. http://rtp.acvecc.org/)

8.3 **Year III Resident's Program**

8.3.1 Weeks of training described in table above.

8.3.2 The resident will continue grant submission and begin their original research study if it is not already started.

8.3.3 The resident will submit one paper suitable for publication to their mentor and the House Officer Chair by June 1.

8.3.4 The residents will participate in the instruction of clinical students and Residents. In order to meet ACVECC requirements, the resident will participate in the instruction of skills laboratories for Residents and students (minimum of 2 hours per year).

8.3.5 The resident will participate in house officer rounds, ward rounds, journal club, special topic conferences, seminars, and other scheduled conferences of the LVMC. He/She will attend other scheduled seminars in the CVM as time permits.

8.3.6 The resident will present 1 seminar and 1 case presentation (to faculty and house officers) on topics of interest to the resident during LVMC House Officer Seminar/Case Presentation sessions.

8.3.7 The resident will present a minimum of 1 lecture per year in the Small Animal Emergency and Critical Care course and/or Resident rounds as assigned by the ECC faculty.

8.3.8 The resident will present 2 lectures per year in ECC resident topic rounds. This lecture will be on a single topic at a level appropriate for presentation fellow ACVECC residents and diplomats.
8.3.9 The resident will be the primary presenter during 2 ECC journal club rounds sessions and 2 ECC morbidity and mortality rounds sessions per year.

8.3.10 The resident will be responsible for preparing questions, as per ACVECC guidelines, on assigned topics for mock exam sessions.

8.3.11 The resident must complete ACVECC training benchmarks for review by their advisor by December 20\textsuperscript{th} and June 20\textsuperscript{th}.

8.3.12 The resident should make applications for sitting the ACVECC certifying examination. The credentials application and fee is due around January 15 of the year the exam is to be taken. Final fee remittance for accepted applicants is due around May 1. Exact dates should be verified with ACVECC (http://acvecc.org/blog/residency-forms/).

8.3.13 Weeks of service and seminars must be logged as per ACVECC guidelines via the Residency Training Database and submitted as per the credential application. http://rtp.acvecc.org/)

8.5 External Rotations

8.5.1 Required: External rotations (away from ISU) may be necessary if the number of qualified diplomates, caseload or equipment are insufficient to provide required training or training in another specialty area is needed.

8.5.2 Elective: The purpose of an elective block is to allow resident/Resident the opportunity to learn skills and obtain knowledge in clinical areas of special interest. In coordination with the program director and advisor, the resident/Resident may select a clinical block within the ISU CVM or at another medical facility. The resident/Resident should seek rotations at other facilities only if this opportunity does not exist at the ISU CVM.

8.5.2.1 Protocol:

8.5.2.1.1 A minimum of three months prior to the scheduled elective present your proposal to your advisor for preliminary approval.

8.5.2.1.2 Contact the desired elective site and determine the feasibility of your rotation, including start and end dates. Present them with preliminary objectives and determine if they are able to fulfill these objectives.
8.5.2.1.3 Determine if professional insurance will be required by the elective site and procure appropriate insurance.

8.5.2.1.4 Write formal objectives for your elective and present them to your advisor to request approval from the program faculty.

8.5.2.1.5 Present the approved objectives to your elective mentor. Obtain a letter from the mentor of your elective rotation stating they or their institution can meet the objectives you have set forth and they will be willing to formally evaluate your performance.

8.5.2.1.6 Present the letter of acceptance from your elective mentor to the program faculty & director for final approval.

8.5.2.1.7 Perform admirably in your elective rotation. Arrange for the completed elective evaluation form (Appendix I) to be sent to your program director/advisor from the elective mentor. The evaluation should include comments regarding the fulfillment of the agreed upon objectives.

8. 6 Emergency duty

All House Officers will participate in emergency duty with other residents, Residents and faculty. Emergency duty commits the House Officer to evening, weekend and holiday duty on a rotating basis. While such activities will be closely supervised early in the program, the House Officer is expected to develop appropriate skills in emergency patient care which will require less supervision as the program progresses.

No resident or specialty Resident will be scheduled for more than 80% of their time for primary emergency duty. Their emergency duty will be limited to their area of specialty training. All emergency duty assignments will be backed up by a faculty member in the specialty area.

9. Scholarly Activities

The Lloyd Veterinary Medical Center requires its residents to participate in scholarly activity such as literature reviews, and basic, applied or clinical research. To that end the resident is encouraged to:
9.1 Finish the started research project they are provided at the beginning of their residency.

9.2 Upon completion of this initial project, the resident should design their own original and prospective research project to address a specific question or problem in the discipline.

9.3 Write a research grant proposal that may be used to seek funding for the project.

9.2.1 The anticipated timeline for completion of the proposal should be the end of the second year of residency.

9.2.2 Proposals are to be submitted for funding.

9.3 Begin to collect data according to the experimental design.

9.3.1 Research is to be conducted during off-clinic time unless research is a clinical trial which can be conducted while on clinics.

9.3.2 It is not expected that the candidate will finish this project, but rather pass it to an incoming first year resident for completion.

9.4 Analyze and report the results of the first completed project

9.4.1 Research is to be presented to the VCS faculty and House Officers during seminar.

9.5 Publication of these results in a refereed journal is expected.

9.5.1 A manuscript suitable for publication is to be completed prior to the conclusion of the residency.

10. **Facilities and Equipment**

10.1 The College of Veterinary Medicine, Lloyd Veterinary Medical Center (LVMC) is a fully accredited hospital (AAHA, AALAC) with full AVMA accreditation. The facility encompasses the Iowa State Veterinary Diagnostic Laboratory, an accredited (AAVLD) full service laboratory providing clinical pathology, histopathology, immunohistochemistry, immunology, microbiology, virology and toxicology support. The LVMC contains full service small and large animal medicine and surgery facilities.

10.2 **Library and other Literature Resources**

The Veterinary Medical Library, housed within the College of Veterinary Medicine building, contains both human and veterinary textbooks as well as bound serial publications. Parks library on main campus is easily accessible via
daily transport of holdings between libraries upon request. An extensive
collection of online journal subscriptions is available to the House Officers free of
charge via the Interlibrary Loan/Document Delivery service. Computer-based
retrieval systems MEDLINE, CAB and AGRICOLA abstracts are available
electronically. A wide selection of current journals is available in the library and
online.

10.2.1 Each resident is required to be familiar with pertinent articles in the
current literature. Reasonable expenses for photocopying are defrayed by
the Hospital.

11. **Evaluation and Reappointment**

11.1 A written critique will be provided at least every 6 months by the advisor or
section. The critique will cover:

11.1.1 Professional ability; to include theoretical knowledge and application of
that knowledge, clinical skills, tutorial skills, and scholarly activity.

11.1.2 Hospital services; to include communication skills, patient care, medical
record quality, emergency duty quality, and adherence to LVMC protocol.

11.1.3 Personal characteristics; to include responsibility, initiative, interaction
with faculty, staff and students, department and leadership.

11.2 The resident will meet with his or her advisor to discuss their progress. A
summary of the discussion will be signed by both advisor and House
Officer.

11.2.1 In the case of an unsatisfactory performance the advisor and program
director will develop an action plan to guide improved performance. The
action plan must include the following elements:

11.2.1.1 A list of action items to be accomplished that are detailed,
clear, and aligned with a timeline

11.2.1.2 A specific date for follow-up evaluation

11.2.1.3 A description of consequences if the action items are not
completed by the designated timeline.

11.3 In March of each year, the House Officer Committee will review the year’s
critiques. Following that review, the committee will make a
recommendation to the Director of Hospital Operations of the Lloyd
Veterinary Medical Center to:
11.3.1 Continue the appointment for another year with or without probation

11.3.2 Award a certificate upon satisfactory completion of the program.

11.3.3 Not to reappoint the resident, with a minimum of 30 days’ notice of termination. At the discretion of the House Officer Committee and in consultation with the resident’s service, guidelines can be formulated that if met, may allow the resident to be re-instated at the end of the specified period.

11.3.3.1 House officers that are evaluated as unsatisfactory and are currently working under an action plan are not eligible for a pay increase (usually July 1st). Once the house officer has made significant progress and the action plan marked as successfully completed, they could be eligible for a pay increase (usually January 1st).

11.4 The resident will be asked each year to make an assessment of their program with suggestions for improvement. The evaluation form will be handed out in May or June and must be returned before completion of that year in July.

12. **House Officer Committee**

The committee is comprised of a representative of each house officer program, the VCS Head (ex officio), and the Director of the LVMC (ex officio). It will be responsible for:

12.1 The selection of House Officers from the application pool (with the advice of the faculty of the sponsoring discipline)

12.2 Annual review of the House Officer's progress (in the ninth month of each year)

12.3 Annual recommendation for reappointment of the House Officer or program completion.

12.4 Program approval, renewal, oversight and establishment of policy

13. **Employment and Benefits**

13.1 Iowa State University House Officers are classified as D base employees as either an Resident or resident and as such are governed by the House Officers Handbook.
13.2 Iowa State University offers a competitive salary and a comprehensive benefit package to house officers. Full benefits are offered, including medical, dental, and retirement contributions.

13.2.1 All University employees are covered under ISU’s general liability protection. This would provide malpractice protection for veterinary services provided during the normal course of professional practice for the ISU veterinary teaching hospital. If you desire additional malpractice insurance and/or license defense insurance, you should obtain this from a private provider.

13.3 The annual salary for residents is approximately $29,000.00; incremental annual raises may be awarded in the second and third year. The salary (not a stipend) is published in the Directory of Residentships and Residencies as published by the American Association of Veterinary Clinicians (www.virmp.org). Salary is payable in monthly increments. Retirement contributions, social security, federal and state taxes are withheld from each paycheck.

13.4 As employees of the University, residents are considered full-time D-base employees and earn 16.0 hours per month of vacation/annual leave (192 hours or 24 days/year) and 12.0 hours per month of sick leave in accordance to ISU’s benefits policy.

13.4.1 Annual leave may only be taken/granted for the amount of time accrued.

13.4.2 Annual leave is to be taken when the house officer is not scheduled on clinic or emergency duty. Vacation requests must be made at least 2 weeks in advance of the desired vacation time.

13.4.3 After approval by the House Officer’s advisor, requests must be made on the standard University Leave Form reviewed by the Program Director/Coordinator and signed by the program’s Section Leader and the Director of Hospital Operations of the Lloyd Veterinary Medical Center. (see Appendix E)

13.4.4 Accrued vacation time must be used during the term of the appointment or it will be forfeited upon termination. Vacation must not be used during the final three weeks of the term of the appointment.

13.5 A cell phone, desk, chair, place for book storage, and filing cabinet are also provided for each House Officer. A computer system is provided with word processing, spread sheet and presentation programs along with unlimited internet access and e-mail.

13.6 The Veterinary Medical Center operates year round. The resident will share with other House Officers an emergency duty rotation. The rotation will commit the
resident to a share of evening, weekend and holiday duty on a scheduled basis.

13.7 Consultation Policy (Outside Employment):
Concurrent employment of the resident at a site other than Iowa State University, College of Veterinary Medicine during their program is allowed provided the activity is approved by the House Officer’s advisor and the program director and a CVM Consultation Request Approval Form is completed and approved by the Director of Hospital Operations and the college dean prior to any consulting activities. (see Appendix D)

13.8 Reappointment to the second and third year of the residency program is contingent upon satisfactory completion of the previous year's requirements.

14. Applications

14.1 Candidates may apply for the Residency by completing:

14.1.1 A standard residency online application (V.I.R.M.P. application).

14.1.2 A statement of objectives for the residency and subsequent career goals.

14.1.3 A transcript of his/her academic record.

14.1.4 Three letters of reference from individuals currently familiar with the applicant's professional status.

14.1.5 A curriculum vitae.

14.2 Selection is based on:

14.2.1 The above documents.

14.2.2 Interviews may be required.

14.3 For more information about this program, please contact Dr. April Blong, Iowa State University, College of Veterinary Medicine, Department of Veterinary Clinical Sciences, 1809 South Riverside Drive, Ames, Iowa 50011-3619. (Telephone 515-294-4900; email: aeb287@iastate.edu.

14.4 Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, sex, marital status, disability or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Diversity, 3680 Beardshear Hall, (515) 294-7612.

15. Appendices
A. Faculty in support of the Program
B. Code of Conduct & Collegiality
C. Communication Trees
D. Consultation Request
E. House Officer Leave Request (in LVMC office)
F. House Officer Case Presentation Evaluation Form
G. LVMC House Officer Seminar Evaluation Form
H. House Officer Evaluation Form
I. House Officer External Rotation Evaluation Form
J. Service Expectations
K. Other Forms
Appendix A. Faculty in Support of the Program

Anesthesiology
Michael Curtis, DVM, PhD, Diplomate ACVAA
Bonnie H. Kraus, DVM, Diplomate ACVS, Diplomate ACVAA
Dean H. Riedesel, DVM, PhD, Diplomate ACVAA
Stefano Di Concetto, DVM, MS, Diplomate ACVAA

Cardiology
Jessica Ward, DVM, Diplomate ACVIM (Cardiology)
Wendy A. Ware, DVM, MS, Diplomate ACVIM (Cardiology)

Dermatology
Darren Berger, DVM, Diplomate ACVD
James O. Noxon, DVM, Diplomate ACVIM (Internal Medicine)

Dentistry
Brenda Mulherin, DVM, Diplomate AVDC

Diagnostic Imaging
Kristina G. Miles, DVM, MS, Diplomate ACVR
Elizabeth A. Riedesel, DVM, Diplomate ACVR

Emergency and Critical Care Medicine
April Blong, DVM, Diplomate ACVECC
Julie Riha, DVM
Rebecca Walton, DVM, Diplomate ACVECC

Food Animal Medicine & Surgery

Hospital-based:
   Amanda Kreuder, DVM, PhD, Diplomate ACVIM-LAIM
   Jennifer Schleining, DVM, MS, Diplomate ACVS-LA
   Joseph Smith, DVM, MPS, Diplomate ACVIM-LAIM
   Paul Plummer, DVM, PhD, Diplomate ACVIM-LAIM, Diplomate, ECSRHM

Field-based:
   Patrick Gorden, DVM, ABVP (Dairy)
   Troy Brick, DVM, MS (Beef, Dairy, Small Ruminant, Swine)
   Kelly Still-Brooks, DVM, MPH, Diplomate ACVPM (Small Ruminant Production)
   Paul Plummer, DVM, PhD, ACVIM (LAIM) (Small Ruminant, Camelid, Cervid)
   Terry Engelken, DVM, MS (Beef Production)
   Grant Dewell, DVM, MS, PhD (Beef Production)
   Locke Karriker, DVM, MS, Diplomate ACVPM (Swine Program)

Internal Medicine-LA
Brett Sponseller, DVM, PhD, Diplomate ACVIM-LA
David Wong, DVM, MS, Diplomate ACVIM-LA, ACVECC
Katarzyna Dembek, DVM, MS, PhD, Diplomate ACVIM-LA

Internal Medicine-SA
Albert E. Jergens, DVM, PhD, Diplomate ACVIM (Internal Medicine)
Chad Johannes, DVM, Diplomate ACVIM (Internal Medicine and Oncology)
Dana LeVine, DVM, PhD, Diplomate ACVIM (Internal Medicine)
Karim Allenspach, DrMedVet, FVH, PhD, Diplomate ECVIM (Internal Medicine)
Jean-Sebastien Palerme, DVM, MSc, Diplomate ACVIM (Internal Medicine)
Laura Van Vertloo, DVM, MS, Diplomate ACVIM (Internal Medicine)

**Neurology**
Rodney Bagley, DVM, Diplomate ACVIM (Neurology), Department Chair (practice limited to consultation)

**Oncology**
Chad Johannes, DVM, Diplomate ACVIM (Internal Medicine and Oncology)
Margaret Musser, DVM, Diplomate ACVIM (Oncology)
Leslie E. Fox, DVM, MS, Diplomate ACVIM (Internal Medicine)

**Ophthalmology**
Rachel Allbaugh, DVM, MS, Diplomate ACVO
Gil Ben-Shlomo, DVM, PhD, Diplomate ACVO
Lionel Sebbag, DVM

**Primary Care**
Bryce Kibbel, DVM
Jennifer Scaccianoce, DVM
Bianca Zaffarano, DVM

**Surgery -SAS**
Cheryl Hedlund, DVM, MS, Diplomate ACVS
Karl Kraus, DVM, MS, Diplomate ACVS
Mary Sarah Bergh, DVM, MS, Diplomate ACVS-SA, Diplomate ACV Sports Medicine
Louisa Ho Eckart, DVM, Hons MS, Diplomate ACVS-SA
William D. Hoefle, DVM, MS, Diplomate ACVS
Eric Zellner, DVM, Diplomate ACVS-SA

**Surgery – Equine**
Stephanie Caston, DVM, Diplomate ACVS-LA
Kevin Kersh, DVM, Diplomate ACVS-LA
Larry Booth, DVM, MS, Diplomate ACVS
Alex Gillen, VetMB, MRCVS, MA, Diplomate ACVS-LA
Tamara Swor, DVM, Diplomate ACVS-LA, Diplomate ACVECC-LA (Surgical Educator)
Dane Tatarniuk, DVM, MS, Diplomate ACVS-LA

**Surgery – Food Animal**
Jennifer Schleining, DVM, MS, Diplomate ACVS-LA

**Theriogenology**
Swanand Sathe, BVSc. MVSc. MS Diplomate ACT
Tyler Dohlman DVM, MS, Diplomate ACT
Nyomi Galow-Kersh, DVM

**Others:**
Frank Cerfoli, DVM (Clinical Skills)
Anges Bourgois-Mochel (Clinical Trials)
Joyce Carnevale, DVM, MS, Diplomate ABVP (Shelter Medicine)
June Olds, DVM (Adjunct, Zoo)
Appendix B. **Code of Conduct and Collegiality**

A code of conduct is meant to help guide professionals in proper interaction with other professionals. No document can be all inclusive or specific. This list is meant to direct a professional veterinarian, or veterinary student, toward proper conduct and interactions within the hospital and college.

1. Each clinician (faculty, residents, and Residents) has numerous interactions with veterinary students and should realize that they are role models for these students. Professional attire and language, and appropriate interactions with referring veterinarians are expected at all times. All clinicians must take care to never use denigrating or insulting language when referring to other veterinarians including referring veterinarians, or to students.

2. Clinicians should refer to each other and other veterinarians as “Doctor” while in the hospital and should instruct students to do the same.

3. All clinicians should strive for the best care for all patients in our hospital. It is inevitable that there will be differences of opinion as to what that best care entails. There is also the possibility that a clinician, for whatever reason, is not caring for a patient to a standard appropriate for this hospital. If a clinician feels that a patient is not cared for appropriately or to a certain standard, then that clinician should discuss their concerns with the attending clinician in a collegial manner (in private venue, not in front of colleagues or students).

4. It is appropriate to collegially discuss the care of cases in case rounds and in the presence of the attending clinician on the case. It is inappropriate to question the care of a patient by another clinician in the presence of clients, students, house officers, referring veterinarians, or attending clinicians outside of case rounds or without the presence of the attending clinician. This is a severe breach of medical ethics and may warrant corrective measures.

5. Students and clinicians come from diverse backgrounds and cultures. It is inappropriate to discuss another professional’s personal life while conducting hospital business.

6. **College of Veterinary Medicine Collegiality Policy:**

All CVM employees have a responsibility to maintain a positive workplace that is free of discrimination and harassment. Collegial interactions with all co-workers in the CVM are required. Faculty and staff are expected to model safe and fiscally responsible behavior for students, and are expected to be in compliance with established policies of the CVM and Iowa State University (including the ISU Code of Computer Ethics and Acceptable
Use, biosafety regulations, OSPA, purchasing, etc.). All faculty and staff are expected to participate in the annual performance evaluation process.
Appendix C. **Communication Trees**

Personnel interactions:

1. **Conflict Recognized**
   - House officer (H.O.)
   - Other person (Technician, intern, resident, faculty) Service 2

2. **Conflict unresolved**
   - H.O. (Service 1) meet with
   - On-clinic service (1) faculty
   - Other person (Service 2) meet with
   - On-clinic service (2) faculty

3. **Conflict unresolved**
   - On-clinic service (1) faculty
   - On-clinic service (2) faculty

4. **Conflict unresolved**
   - Service (1) Leader*
   - Service (2) Leader*

5. **Conflict unresolved**
   - Service Leaders
   - HO Chair

6. **HO Committee Discussion**
   - Resolution
     - Protocol established
   - Unresolved
     - To Director Hospital Operations (HO & hospital issues)

*Advisors are apprised when deemed appropriate.
Client Complaint via evaluation of service or other means to Hospital Director or other Administrators:

**Problem Reported**
- Director Hospital Operations to notify House officer’s service faculty mentor & advisor

**Problem Investigated**
- Service faculty mentor meets with House Officer
- Service faculty mentor discusses with advisor

**Problem Discussed**
- Faculty Advisor meets with House Officer to discuss
- Advisor offers suggestions how to avoid similar problems in the future

**Advisor Reports**
- Episode to HO Program Director
- Outcome to Director of Hospital Operations

**Unresolved Problem**
- HO Program Director or Director of Hospital Operations reports to HO Committee Chair

**HO Committee Chair**
- No Further action or Committee Discussion

**Resolution**
- Protocol established
- Corrective action taken
- Continuation in program discussed

**Resolution Reported or Unresolved**
- To Dept. Head (faculty issues)
- To Director of Hospital Operations (HO & hospital issues)
Appendix D. Consulting Request

Consulting Request Approval Form

IOWA STATE UNIVERSITY
College of Veterinary Medicine

Date of Request: __________________________

Name: ________________________________

Proposed Date for Consulting Activities: __________________

Who are you consulting for? ________________________

Where will you be consulting? ______________________

What is the purpose of the consulting activity? ______________________

Reminder: All full-time faculty and P&S staff are required to disclose potential conflicts of interest annually, or whenever their situation changes, whether they think they have a conflict of interest or not. Using the Access Plus system, faculty and P&S staff should go to the Employee tab and click on "COI Disclosure" and fill in the Conflict of Interest Disclosure Form. If you have any questions, please review the COI policy at http://provost.iastate.edu/COI/

APPROVAL:
Department Chair ______________________

Director of Hospital Operations: ______________________

College Dean: ______________________

Please Note: Must be approved by the Department Chair, Director of Hospital Operations (when applicable) and Dean prior to consulting activity.

3/21/15
Appendix E. **House Officer Leave Request (in LVMC office)**

**Guidelines for Scheduling Leave:**

The procedure for requesting **vacation** is as follows:

1. Determine the times/days for your absence.
2. Confirm the time and dates with your program director and advisor.
3. Fill out an Absence Request card (sample enclosed) *two weeks in advance of your planned vacation day(s)*.
4. Have the card signed by your program director.
5. Give the card to the person in charge in the Hospital Director’s Office.
6. Inform the reception desk of your absence and the dates.
7. Place a red card in your message slot at the front desk indicating you are not in the clinic.

The procedure for requesting an approved **external rotation** is similar:

1. Approved external rotations are considered authorized leave.
2. Notify advisor and program director well in advance of your intent to participate in an out-rotation. *(See section 8.5)*
3. Organize the rotation with an approved program and mentor at the external rotation location with the assistance of your advisor &/or program director.
4. Obtain final approval of the program director at least four weeks in advance of the rotation.
Appendix F. **House Officer Case Presentation Evaluation Form**

<table>
<thead>
<tr>
<th>Case Presentation Evaluation Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>House Officer: ___________________</td>
</tr>
<tr>
<td>Date: ___________________________</td>
</tr>
<tr>
<td>Evaluation</td>
</tr>
<tr>
<td>E = excellent</td>
</tr>
</tbody>
</table>

**Case Selection**

- Complexity of case: ________
- Appropriate case follow-up: ________

**Content**

- Format of presentation (complete, logical, appropriate length): ________
- Use of problem-oriented approach: ________
  - (data or evidence to support important points)
- Knowledge of subject (well researched, accurate, comfortable, question response): ________
- Discussion (relevance, good references, accurate): ________
- Conclusions: ________

**Delivery**

- Clarity of speech (mumbles, clear, pronunciation, vocalized pauses [uh, um, well, so, etc.]): ________
- Rate of delivery (too fast, too slow): ________
- Eye contact (consistent, entire audience, notes): ________
- Body language/enthusiasm (nervous, relaxed, self-confidence): ________

**Effectiveness of presentation**

- Use of visual aids (spelling, wordiness, colors, clarity, appropriate images, organized): ________
- Professionalism (attire, appropriate humor, self-confident): ________
- Questions handled appropriately: ________

**Additional Comments:**

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

Evaluator: ____________________________________________________________

Appendix G. **LVMC House Officer Seminar Evaluation Form**
LVMMC House Officer Seminar Evaluation

Presenter: ___________________________ Date: __________________________

Audience: __________________________________________________________

Title/Topic: ________________________________________________________

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Points</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Definition of Subject: introduction, importance, clinical significance</td>
<td>0-5 pts</td>
<td>__________</td>
</tr>
<tr>
<td>2. Organization:</td>
<td>0-15 pts</td>
<td>__________</td>
</tr>
<tr>
<td>3. Quality of material, scientific depth</td>
<td>0-15 pts</td>
<td>__________</td>
</tr>
<tr>
<td>4. Presence: Speaking ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Clarity</td>
<td>0-10 pts</td>
<td>__________</td>
</tr>
<tr>
<td>b. Rate of delivery</td>
<td>0-10 pts</td>
<td>__________</td>
</tr>
<tr>
<td>c. Enthusiasm, expressiveness, mannerisms</td>
<td>0-10 pts</td>
<td>__________</td>
</tr>
<tr>
<td>5. Visual aids: slides &amp; text, images, graphs</td>
<td>0-10 pts</td>
<td>__________</td>
</tr>
<tr>
<td>6. Appropriate summary?</td>
<td>0-5 pts</td>
<td>__________</td>
</tr>
<tr>
<td>7. Presentation consistent with audience level?</td>
<td>0-10 pts</td>
<td>__________</td>
</tr>
<tr>
<td>8. Questions/discussion handled appropriately?</td>
<td>0-10 pts</td>
<td>__________</td>
</tr>
</tbody>
</table>

**Total** __________

Comments: ______________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

Evaluator: ____________________________
Appendix H. **ECC Resident evaluation form:**

The resident is to complete all areas (except faculty feedback sections) of this evaluation and submit it to their faculty advisor at least one week before their scheduled evaluation. At the evaluation, the Resident’s progress will be discussed and feedback given.

**Clinical skills:**
- Please describe areas of clinical case management in which you feel you excel:
- Please describe areas of clinical case management in which you feel you could improve; include goals/plans on how to improve these areas:
- Please describe ways in which the ECC faculty can help you to achieve these goals:
- Faculty feedback of ECC Resident’s clinical case management skills:
  (1 is poor or almost never, 3 is average, 5 is outstanding or almost always)
  - Ability to manage basic emergency cases
  - Ability to manage complex emergency cases
  - Ability to manage basic critical care cases
  - Ability to manage complex critical care cases
  - Does the Resident ask for faculty assistance when indicated
  - Resident’s attention to detail on case management
  - Does Resident demonstrate compassionate care for patients
  - Comments:

**Teaching/Communication skills:**
- Please describe ways and/or situations in which you feel you excel at teaching students; rotating Interns:
- Please describe areas related to teaching students and rotating Interns in which you feel you could improve; include goals/plans on how to improve these areas:
- Please describe ways in which the ECC faculty can help you to achieve these goals:
- Faculty feedback regarding ECC Resident’s teaching of students and rotating Interns:
- Please describe ways/situations in which you feel you excel at communicating with staff; RDVM’s; clients:
- Please describe ways/situations in which you feel you could improve communicating with staff; RDVM’s; clients: (include goals/plans on how to improve these areas)
- Please describe ways in which the ECC faculty can help you achieve these goals:
- Faculty feedback of ECC Resident’s communication:
  - Ability of the Resident to conduct student topic rounds
  - Ability of the Resident to discuss case presentations w/ students
  - Willingness of the Resident to teach students
  - Resident’s interaction skills with technical staff
  - Owner communication
  - RDVM communication
  - Ability of the Resident to guide rotating Interns
o Ability of the Resident to teach rotating Interns when impromptu learning opportunities arise
  1 2 3 4 5
o Ability of the Resident to give constructive criticism
  1 2 3 4 5
o Ability of the Resident to receive constructive criticism
  1 2 3 4 5
o Comments:

Research/presentation skills:

- Please list any presentations that you have prepared and given since the last evaluation:
- Please list any research activity that you have performed since the last evaluation:
- Please describe areas related to research and presentations in which you feel you excel:
- Please describe areas related to research and presentations in which you feel you could improve; include goals/plans on how to improve these areas:
- Faculty feedback of ECC Resident’s presentation skills and research activity:
  o Resident presentation skills
  1 2 3 4 5
  o Residents preparedness for ECC rounds
  1 2 3 4 5
  o Residents ability to prepare original research
  1 2 3 4 5
  o Residents ability to conduct original research
  1 2 3 4 5
  o Comments:
# Appendix I. **House Officer External Rotation Evaluation Form:**

Lloyd Veterinary Medical Center  
House Officer Evaluation for External Rotations  
(away from ISU)

<table>
<thead>
<tr>
<th>House Officer:</th>
<th>Rotation Location:</th>
<th>Dates:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISU Faculty Advisor/Program Director:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Unsatisfactory</th>
<th>Not Evaluated</th>
<th>Remarks</th>
</tr>
</thead>
</table>

## Professional Ability
- Theoretical knowledge
- Application of knowledge
- Technical skills

## Professional Development
- Awareness of current literature
- Ability to make independent decisions
- Attendance at seminars/rounds
- Participations in seminar/rounds
- Contribution to student education

## Personal Characteristics
- Quality of faculty/supervisor interaction
- Quality of intern/resident interaction
- Quality of student interaction
- Quality of staff interaction
- Independence and initiative
- Maturity
- Motivation
- Attitude and enthusiasm
- Leadership qualities

## Hospital/Clinical Service
- Completion of duties
- Quality of work
- Acceptance of service responsibilities
- Work towards service objectives
Appendix J. **Service Expectations:**

Please review these at [https://vetzone.cvm.iastate.edu/policies-and-documents/](https://vetzone.cvm.iastate.edu/policies-and-documents/)

Appendix K. **Other Forms:**