Residency in Small Animal Emergency & Critical Care: Program Specifics

Please see “House Officer Programs: General Information” for basic information common to all internship and residency programs. The following information highlights specific program requirements of the Small Animal Emergency & Critical Care residency program.

Program Director: Dr. April Blong (aeb287@iastate.edu; 515-294-4900)
Faculty Diplomates serving as supervisors and potential advisers of the program:
- Victoria Miller, DVM, DACVECC
- April Blong, DVM, DACVECC
- Meredith 't Hoen, DVM, DACVECC, DECVECC
- Maria Vegas, DVM, DACVECC
Note: Diplomate status is required for faculty to serve as a resident mentor.

Prerequisites and Application
- Candidates must have successfully completed, at minimum, a one-year rotating internship in small animal medicine and surgery OR have equivalent years of experience in small animal practice (at least 4 years).
- For positions advertised within VIRMP: in addition to the standard VIRMP application, an interview will be required with the Emergency and Critical Care faculty via phone, teleconference, or in person.
  - After reviewing the applications received, the ECC faculty will extend invitations via phone and email to potential candidates.
  - Applicants who do not agree to or are not able to arrange an interview will not be considered further.
- For positions advertised outside of VIRMP: in addition to the application packet from ISU Jobs, an interview will be required with the Emergency and Critical Care faculty in person.
  - After reviewing the applications received, the ECC faculty will extend invitations via phone and email to potential candidates.
  - Applicants who do not agree to or are not able to arrange an interview will not be considered further.

Specialty College: American College of Veterinary Emergency and Critical Care
- Residents are STRONGLY ENCOURAGED to read the current residency training standards published by ACVECC so they fully understand all obligations necessary to the College.
- Residents must follow requirements for candidate registration, certification, and examination as per ACVECC guidelines (www.acvecc.org).
- The resident must register with the specialty college no later than August 1st of the year their residency starts (http://acvecc.org/blog/residency-forms/)
- 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/).
- The resident must complete ACVECC training benchmarks for review by their advisor by December 20th and June 20th of each year of the program. Completed benchmarks must be uploaded to the Residency Training Database for mentor approval.
- The resident must complete DEI training as per ACVECC residency training standards. This will be met by registering and completing the Purdue DEI in veterinary medicine program (online). The faculty will register each resident after which the resident has one year to complete the program requirements.
- The resident must 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/).

**Clinical program requirements (example)**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 weeks ECC immersion</td>
<td>26 weeks ECC immersion</td>
<td>26 weeks ECC immersion</td>
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<tr>
<td>14 weeks independent study/practice</td>
<td>13 weeks independent study/practice</td>
<td>16 weeks independent study/practice</td>
</tr>
<tr>
<td>Required Rotations:</td>
<td>Required Rotations:</td>
<td>Required Rotations:</td>
</tr>
<tr>
<td>2 wk Internal medicine</td>
<td>2 wk Internal medicine</td>
<td>2 wk Internal medicine</td>
</tr>
<tr>
<td>2 wk SA Surgery</td>
<td>2 wk SA Surgery</td>
<td>2 wk SA surgery (or human ER/ICU)</td>
</tr>
<tr>
<td>2 wk Anesthesia</td>
<td>2 wk Radiology</td>
<td>2 wk Ophthalmology</td>
</tr>
<tr>
<td>2 wk Cardiology</td>
<td>3 wk Neurology</td>
<td>2 wk Elective</td>
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<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>
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**Residents are given 16-18 week “off” of ECC clinical duty each year. This time encompasses the necessary non-ECC rotations, up to 2 weeks of vacation per year, and research/study time (~6 weeks per year).**

- It is the responsibility of each resident to ensure they use their weeks “off” accordingly to meet the ACVECC requirements.
- When scheduling rotations with other services, it is expected the resident will contact the service leader a MINIMUM of 3-4 months prior to the desired time on another service. Remember to be flexible, services cannot always accommodate a visiting HO on some weeks.
- If you need help identifying who to contact about schedule arrangements or are having difficulty arranging time on a service please let your adviser or Dr. Blong know.
- Within the first three months of residency, residents are also expected to coordinate with the radiology service to obtain radiology training with Stephanie Cannon (typically 1 day in length).
- Within the first three months of residency, residents are expected to coordinate the Amy Hodenfield for training regarding the blood bank. This will include
selecting and logging product used as well as collection and processing of blood units.

- The completion of VetCOT trauma forms for patients seen by the resident is a requirement of the program.

**The resident should expect to work at least 50% (but not more than 80%) of weekends and holidays, as well as some overnight work (not more than 25%).**

**Seminar/Rounds requirements**

<table>
<thead>
<tr>
<th>Rounds type</th>
<th>Frequency</th>
<th>Day/Time</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>HO Seminar/Case Presentation</td>
<td>Weekly</td>
<td>Thursdays @ 8am</td>
<td>Required</td>
</tr>
<tr>
<td>ECC Service Resident Rounds</td>
<td>1-2x weekly</td>
<td>Tues at 3pm in summer</td>
<td>Required</td>
</tr>
<tr>
<td>Radiology-Pathology (RadPath) Rounds</td>
<td>Monthly</td>
<td>4th Tuesday @ 8am</td>
<td>Optional</td>
</tr>
<tr>
<td>Morbidity &amp; Mortality Rounds</td>
<td>Monthly</td>
<td>2nd Tuesday @ 8am</td>
<td>Optional</td>
</tr>
<tr>
<td>SAIM Book Club</td>
<td>Weekly</td>
<td>Fridays @ 9am</td>
<td>Optional</td>
</tr>
<tr>
<td>Student Grand Rounds</td>
<td>Weekly</td>
<td>Fridays @ 8am</td>
<td>Optional</td>
</tr>
</tbody>
</table>

- **ECC Service rounds** are composed of weekly (~49 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.

- During approximately 75% of the year, there will be a second weekly rounds session that rotates between: **ECC literature review, ECC journal club, ECC clinical correlates, ventilator lab, and mock exam.**
  - ECC literature review will involve each service member being assigned one or more ACVECC required/recommended journals and presenting a brief summary (bullet point, abstract level) of relevant literature from that source.
  - 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.
  - ECC clinical correlates 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.
  - 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.
  - Mock exam sessions will involve each service member preparing a small set of questions (typically 4-5 multiple choice or short answer questions) 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. 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.

- Residents will also participate and lead Friday Morning Student rounds at least once a year.

Scholarship and teaching requirements
- Teaching and presentation requirements
  - The residents will participate in the instruction of clinical students and Interns. To meet ACVECC requirements, the resident will participate in the instruction of skills laboratories for Interns and students (average of 2 hours per year).
  - The resident will present a minimum of 1 lecture in the Small Animal Emergency and Critical Care course during their residency.
  - The resident will present a minimum of 1 lecture per year during Intern rounds as assigned by the ECC faculty.
  - The resident will present a minimum of 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.
  - The resident will be the primary presenter during at least 1 ECC journal club rounds sessions and at least 1 ECC clinical correlate rounds sessions per year.
  - The resident will be responsible for preparing questions, as per ACVECC guidelines, on assigned topics for mock exam sessions.
  - 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. 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.
- Research timeline
  - Residents are expected to participate in and recruit patients for clinical trials and perform clinical research.
  - The resident is expected to work on at least one prospective study during their residency (even if it is not fully completed).
  - To ensure publication requirements are met in a timely manner, residents are also expected to perform a case report/series and/or a retrospective study.
  - A manuscript suitable for publication in an ACVECC approved journal should be submitted to the resident advisor by March 1 of the 2nd year of their program.
  - Research is to be conducted during off-clinic time unless research is a clinical trial which can be conducted while on clinics.

Other program specifics that differ from ISU-CVM “House Officer Programs: General Information”
- Any elective external rotations must be approved by the resident advisor 3 months prior to the scheduled elective time.
- As part of the review evaluation process, ECC residents will complete the following Self-Evaluation Form for Q2 and Q4 evaluations:

ECC Resident Self-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 1 2 3 4 5
  - Ability to manage complex emergency cases 1 2 3 4 5
  - Ability to manage basic critical care cases 1 2 3 4 5
  - Ability to manage complex critical care cases 1 2 3 4 5
  - Does the Resident ask for faculty assistance when indicated 1 2 3 4 5
  - Resident’s attention to detail on case management 1 2 3 4 5
  - Does Resident demonstrate compassionate care for patients 1 2 3 4 5
  - 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 1 2 3 4 5
  - Ability of the Resident to discuss case presentations w/ students 1 2 3 4 5
  - Willingness of the Resident to teach students 1 2 3 4 5
  - Resident’s interaction skills with technical staff 1 2 3 4 5
  - Owner communication 1 2 3 4 5
  - RDVM communication 1 2 3 4 5
  - Ability of the Resident to guide rotating Interns 1 2 3 4 5
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: