

Residency in Food Animal Internal Medicine: 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 Food Animal Internal Medicine residency program.

Program Director: Dr. Vengai Mavangira (vmavang@iastate.edu; 515-294-8716)

Faculty Diplomates serving as supervisors and potential advisers of the program; Diplomates serving in an indirect, supportive capacity*:

- **Hospital-based:**
 - Jared Janke, DVM, DACVIM (LAIM)
 - Jamie Kopper, DVM, PhD, DACVIM (LAIM), DACVECC (LA)
 - Vengai Mavangira, BVSc, PhD, DACVIM (LAIM)
 - Brett Sponseller, DVM, PhD, DACVIM (LAIM)
 - David Wong, DVM, MS, DACVIM (LAIM), DACVECC (LA)
- **Non-Hospital-based:**
 - Amanda Kreuder, DVM, PhD, DACVIM (LAIM)
 - Paul Plummer, DVM, PhD, DACVIM (LAIM), Diplomate ECSRHM

Specialty College: American College of Veterinary Internal Medicine

- Residents must follow requirements for candidate registration, certification, and examination of the ACVIM as outlined online (www.acvim.org).
- Candidates must be eligible for or already accredited by the USDA for purposes of issuing Certificates of Veterinary Inspection and other regulatory duties.
- By the end of the first year of residency, ACVIM requires completion of online learning objectives or webinar series on the following topics:
 - Understanding the credentialing process
 - Selecting a case for and writing assessment (CWA)
- Early in the second year of residency, the resident should submit forms and fees (see www.acvim.org for cost and deadlines) and prepare to take the ACVIM general exam in the spring of the second year.
- At the end of the 2nd year, the resident should submit the credentials packet to ACVIM for approval to take the specialty exam during the 3rd year. The resident should subsequently submit forms and fees (see www.acvim.org for costs and deadlines) and prepare to take the ACVIM certifying examination in January of the 3rd year (assuming all requirements of the ACVIM have been met).
- ACVIM requires 2 clinical writing assessments to be accepted over the course of the residency program as part of the credentialing process. The resident will be expected to have one finalized case report for submission to the ACVIM by the October 1 deadline of the second year, with the second finalized case report completed by the March 1 deadline of the 3rd year. Within ISU, CWAs are reviewed by a panel of LAIM diplomates (food animal and equine faculty) and due dates for draft submission and revisions will be set by the panel for each house officer. These due dates are to be observed in order to ensure a timely review process and finalization of CWAs prior to ACVIM deadlines.

Failure to observe due dates set by the faculty panel can result in rejection / failure of the CWA in its entirety.

- ACVIM requires a first author manuscript to be accepted for publication as part of the requirements to achieve Diplomate status. Completion of this requirement is strongly encouraged to take place prior to the completion of the residency training program.

Clinical program requirements

Year 1	Year 2	Year 3
36 weeks Large Animal Medicine and Surgery	35 weeks Large Animal Medicine and Surgery	35 weeks Large Animal Medicine and Surgery
5 weeks Research, Case Report(s). On-call responsibilities apply and to be coordinated with FA resident in charge of on-call scheduling to ensure equitable coverage.	4 weeks Research, Case Report. On-call responsibilities apply and to be coordinated with FA resident in charge of on-call scheduling to ensure equitable coverage.	4 weeks Research, Case Report(s). On-call responsibilities apply and to be coordinated with FA resident in charge of on-call scheduling to ensure equitable coverage.
N/A	4 weeks general board preparation (off call). *Does not need to be consecutive weeks. 2 weeks off prior to exam recommended.	4 weeks specialty board preparation (off call). *Does not need to be consecutive weeks. 2 weeks off prior to exam recommended.
Required Rotation: 1 week Radiology, Ultrasound or Clinical Pathology 8 weeks specialty rotations (Field Services & other ACVIM diplomates)	Required Rotation: 1 week Radiology, Ultrasound or Clinical Pathology 6 weeks specialty rotations (Field Services & other ACVIM diplomates)	Required Rotation: 1 week Radiology, Ultrasound 6 weeks specialty rotations (Field Services & other ACVIM diplomates)
2 week vacation	2 week vacation	2 week vacation

- The above represents a description of the 52 weeks per year of training for a resident not pursuing a concurrent graduate program.
- The resident is required to take emergency call in rotation with other house officers throughout the 3-year residency. The clinical schedule will be prepared by the program director. Special circumstances such as vacation or leave should be requested and approved by both the section leader and the resident adviser in advance (at least 1 month).
- ACVIM requires that the Clinical Pathology rotation and either Radiology or Ultrasound training be completed by the end of the 2nd year of training.

Seminar/Rounds requirements

Rounds type	Frequency	Day/Time	Commitment
HO Seminar/Case Presentation	Weekly	Thursdays @ 8am	Required
Large Animal Medicine Journal Club	Weekly	Fridays @ 8am	Required
Food Animal Morbidity & Mortality Rounds	Monthly	Fridays @ 4pm	Required
ECG Rounds	Monthly	4 th Weds @ 8am	Suggested
Student Grand Rounds	Weekly	Fridays @ 8am	Suggested

Scholarship and teaching requirements

- During the first year of residency, the resident is strongly encouraged to prepare a research proposal, review it with his/her/their faculty mentor, and submit it for funding consideration.
- In the first or second year of residency, the resident is strongly encouraged to begin work on a research project and begin preparation of a manuscript based on that work for publication. Topic considerations should be discussed with his/her/their project mentor prior to working on the manuscript.
- In the second and/or third year, the resident is strongly encouraged to finish work on the research project and submit for publication. The resident will submit one paper suitable for publication to their mentor and the House Officer Chair by June 1 of the 3rd year of residency, if not before.
- The resident is required to give at least 1 hour of didactic instruction in courses offered to VM1-3 veterinary students during both the second and third year of residency (or suitable alternative, such as a CE presentation).

Other program specifics that differ from ISU-CVM “House Officer Programs: General Information”

- **Residency Summary**
 - In accordance with ACVIM guidelines (Certification Manual [CM] 2018-2019), this residency program will consist of 3 years of supervised training and clinical experience in the discipline of Large Animal Internal Medicine. This program will allow a graduate veterinarian to acquire in-depth knowledge of veterinary internal medicine and its supporting disciplines under the supervision and guidance of diplomates of the ACVIM.
 - Dr. Vengai Mavangira, BVSc, PhD, DACVIM (LAIM), will serve as the Program Director.
 - Applicants for the residency will be required to have completed either a rotating 12-month internship in large animal practice and/or a minimum of 2 years of clinical practice experience prior to the start of the residency.
 - Evaluation of the resident will be performed at a minimum every 6 months by the Resident Advisor, as mandated by the ACVIM. Quarterly evaluations strongly recommended for the duration of the residency program.
 - Completion of a master’s degree or PhD concurrent to the residency training are optional to allow further experience in clinical and basic sciences research,

however, this may involve increasing the length of the residency training program.

- The resident is expected to participate in all aspects of case management including receiving, examination, diagnosing, daily case management, client communication, discharging, and follow-up communication.
 - Residents are also expected to rotate through emergency on call duty and emergency case management on a rotating basis with other Food Animal house officers and clinicians. During emergency duty, the resident will have a scheduled faculty member as a back-up to provide consultation and physical assistance as needed.
 - The resident will primarily be on clinical duty within the Food Animal Hospital, however, rotations within the Equine Hospital as well as other ACVIM-related services within the Iowa State Teaching Hospital and the Food Animal Field Services unit will be highly encouraged. These rotations will be scheduled in coordination with the faculty on these services to prevent an overabundance of residents on the clinic floor.
- **External rotations**
 - Outside rotations are not required of this program, but will be considered if desired by the resident. All finances in support of an outside rotation will be the responsibility of the resident. ACVIM currently sponsors Food Animal Internal Medicine Travel Grants for residents to travel to other institutions to gain experience outside of what is available at their home institution; residents are encouraged to apply for this funding if a suitable outside rotation is identified.