



AMERICAN COLLEGE OF VETERINARY INTERNAL MEDICINE (ACVIM)

General Information Guide (GIG)

Effective July 1, 2009 – June 30, 2010

The information contained in this Guide was submitted for publication on July 1, 2009. It represents the current policies, procedures and requirements for individuals interested in certification by the American College of Veterinary Internal Medicine (ACVIM or the "College"). While every reasonable attempt has been made to assure accuracy, Supervising Diplomates, Resident Advisors and/or candidates should contact the ACVIM office if questions arise. Furthermore, ACVIM policies and procedures are subject to periodic review and change. Should Supervising Diplomates, Resident Advisors and/or candidates have concerns about proposed or actual changes that could impact the certification process, they should contact the ACVIM office:

American College of Veterinary Internal Medicine
1997 Wadsworth Blvd., Suite A
Lakewood, CO 80214-5293 USA
Phone: (800) 245-9081 (toll free in USA and Canada)
(303) 231-9933
Fax: (303) 231-0880
Website: www.ACVIM.org
E-mail: ACVIM@ACVIM.org

INDEX

| | |
|---|-----------|
| A. THE ACVIM VISION STATEMENT, INTRODUCTION AND HISTORY..... | 1 |
| A.1. ACVIM VISION STATEMENT | 1 |
| A.1.a. Purposes of the ACVIM..... | 1 |
| A.1.b. Responsibilities of ACVIM Diplomates | 1 |
| A.1.c. Responsibilities of ACVIM Leadership | 2 |
| A.2. INTRODUCTION TO THE ACVIM | 2 |
| A.3. HISTORY OF THE ACVIM..... | 2 |
| B. ORGANIZATIONAL STRUCTURE OF THE ACVIM | 3 |
| C. ACVIM MEMBERSHIP CATEGORIES..... | 4 |
| D. GENERAL INFORMATION..... | 6 |
| D.1. Admission Process..... | 6 |
| D.1.a. Admission Requirements | 6 |
| D.2. General Certification Process..... | 6 |
| D.2.a. Registration | 6 |
| D.2.b. Procedure..... | 6 |
| D.2.c. Specialty Residency Training | 7 |
| D.2.d. Research Requirements..... | 9 |
| D.2.e. Definitions Relating to Residency Training..... | 10 |
| D.2.f. Examination Options | 11 |
| D.2.g. General Examination..... | 12 |
| D.2.h. Specialty Examinations | 13 |
| D.2.i. Fees | 14 |
| D.2.j. Procedure for Re-application After Examination Failure..... | 15 |
| D.3. Notification Process | 15 |
| D.4. Appeals | 15 |
| D.4.a. Appeals Committee..... | 15 |
| D.4.b. Appeals Process | 16 |
| D.5. ACVIM DIPLOMATE Certificates | 16 |
| D.5.a. Issuance of ACVIM Diplomate Certificates..... | 16 |
| D.5.b. Repossession of ACVIM Diplomate Certificates | 16 |
| E. SPECIALTY OF CARDIOLOGY | 18 |
| E.1. Guidelines for Registered Cardiology Residency Programs..... | 19 |
| E.1.a. Description of the Program..... | 19 |
| E.1.b. Program Supervision..... | 19 |
| E.1.c. General Objectives..... | 20 |
| E.1.d. Specific Training Objectives and Requirements..... | 21 |
| E.1.e. Patient Care | 22 |
| E.1.f. Consultation and Supervision..... | 23 |

| | | |
|-----------|---|-----------|
| E.1.g. | Study and Education | 23 |
| E.1.h. | Facilities and Equipment | 24 |
| E.1.i. | Masters and Ph.D. Programs | 24 |
| E.1.j. | Correspondence and Inquiries | 24 |
| E.2. | Guidelines for Non-Traditional Cardiology Training Programs | 24 |
| E.2.a. | Approval of the Program | 24 |
| E.2.b. | Requirements | 24 |
| E.2.c. | Time in Training | 25 |
| E.2.d. | Documentation | 25 |
| E.2.e. | Case Log | 25 |
| E.2.f. | Academic Degree Programs | 26 |
| E.2.g. | Letters of Reference | 26 |
| E.2.h. | Verifying Program Completion | 26 |
| E.3. | Procedure for Certification in Cardiology | 26 |
| E.3.a. | Items to be Submitted by Applicants | 26 |
| E.4. | Cardiology Specialty Examination | 28 |
| F. | SPECIALTY OF LARGE ANIMAL INTERNAL MEDICINE | 30 |
| F.1. | Minimum Requirements for Residency Training Programs in the Specialty of Large Animal Internal Medicine | 31 |
| F.1.a. | General Description | 31 |
| F.1.b. | Direct Supervision During the (104 week) Clinical Training Program | 32 |
| F.1.c. | Consultation | 33 |
| F.1.d. | Case Management | 33 |
| F.1.e. | Study and Evaluation | 33 |
| F.1.f. | Hospital Facilities and Specialized Diagnostic & Therapeutic Equipment ... | 33 |
| F.1.g. | Library Facilities | 34 |
| F.1.h. | Documentation and Verification of the Large Animal Internal Medicine Residency Program | 34 |
| F.2. | Application Procedure for Certification in Large Animal Internal Medicine | 34 |
| F.2.a. | Applicant Instructions, Specialty Examination | 34 |
| F.2.b. | Instructions for Case Reports | 35 |
| F.2.c. | Publications | 35 |
| F.2.d. | Evaluation Procedure | 36 |
| F.3. | Specialty Examination Format | 37 |
| G. | SPECIALTY OF NEUROLOGY | 38 |
| G.1. | Guidelines for Neurology Residency Programs | 39 |
| G.1.a. | Definition | 39 |
| G.1.b. | Objectives for the Resident | 40 |
| G.1.c. | Description of the Program | 40 |
| G.1.d. | Advisor | 42 |
| G.1.e. | Evaluation | 42 |
| G.1.f. | Certificate | 42 |
| G.1.g. | Clinical Service Rotations | 42 |
| G.1.h. | Emergency Duty | 44 |
| G.1.i. | Teaching Responsibilities (where applicable) | 44 |
| G.1.j. | Research | 44 |

| | |
|---|-----------|
| G.1.k. Annual Reports and Curriculum Vitae | 45 |
| G.1.l. Didactic Program (where applicable)..... | 45 |
| G.1.m. Correspondence and Inquiries | 45 |
| G.2. Application Procedure for Certification in Neurology | 45 |
| G.2.a. Applicant Instructions | 45 |
| G.2.b. Requirements for Application | 46 |
| G.2.c. Application Deadline..... | 46 |
| G.2.d. Candidate's Application Packets | 46 |
| G.2.e. Reference Letters..... | 46 |
| G.3. Specialty Examination Format | 47 |
| H. SPECIALTY OF ONCOLOGY | 48 |
| H.1. Guidelines for Standard Oncology Residency Programs | 49 |
| H.1.a. Description of the Program..... | 49 |
| H.1.b. Academic Degree Programs | 52 |
| H.1.c. Objectives | 52 |
| H.1.d. Program Evaluation..... | 53 |
| H.1.e. Correspondence and Inquiries | 53 |
| H.1.f. Research..... | 53 |
| H.1.g. Publications..... | 53 |
| H.2. Application Procedure for Certification in Oncology | 53 |
| H.2.a. Candidate Instructions..... | 53 |
| H.2.b. Applicant Instructions | 54 |
| H.2.c. Publications..... | 55 |
| H.2.d. Evaluation Procedure | 55 |
| H.3. Specialty Examination Format..... | 55 |
| I. SPECIALTY OF SMALL ANIMAL INTERNAL MEDICINE | 57 |
| I.1. Minimum Requirements for Residency Training Programs in the Specialty of Small Animal Internal Medicine | 58 |
| I.1.a. General Description..... | 58 |
| I.1.b. Direct Supervision During the (156 week) Clinical Training Program | 59 |
| I.1.c. Consultation | 60 |
| I.1.d. Case Management..... | 61 |
| I.1.e. Study and Evaluation | 61 |
| I.1.f. Hospital Facilities and Specialized Diagnostic & Therapeutic Equipment ... | 61 |
| I.1.g. Library Facilities | 61 |
| I.1.h. Documentation and Verification of the Small Animal Internal Medicine Residency Program | 62 |
| I.2. Application Procedure for Certification in Small Animal Internal Medicine | 63 |
| I.2.a. Applicant Instructions, Specialty Examination | 63 |
| I.2.b. Additional Requirements for Certification - Publications..... | 64 |
| I.3. Specialty Examination Format | 64 |

A. THE ACVIM VISION STATEMENT, INTRODUCTION AND HISTORY

A.1. ACVIM VISION STATEMENT

Adopted by the Board of Regents, May 1995; Accepted by the ACVIM Membership, September 1995; Amended 2002 to reflect change from Specialty of Internal Medicine to Specialty of Large Animal Internal Medicine and Specialty of Small Animal Internal Medicine.

In 2007, The Board of Regents approved the following Mission Statement for the ACVIM: The mission of the ACVIM is to enhance animal and human health by advancing veterinary internal medicine through training, education, and discovery.

A.1.a. Purposes of the ACVIM

The purposes of the ACVIM are to advance knowledge of animal health and diseases and to foster the continued development of specialty veterinary care in large animal internal medicine, small animal internal medicine, cardiology, neurology, and oncology. To achieve these purposes, the ACVIM will:

- 1) Certify new Diplomates by guiding training programs and ensuring fair and appropriate credentialing and examination procedures,
- 2) Promote and advocate ACVIM specialization within the veterinary profession, and to the animal owning public, so that the value of certification is recognized,
- 3) Promote continuing education and the dissemination of knowledge in veterinary cardiology, large animal internal medicine, neurology, oncology, and small animal internal medicine, through the ACVIM Forum, *The Journal of Veterinary Internal Medicine*, and other means, and
- 4) Promote the acquisition of new information relevant to the specialties of the ACVIM for the benefit of improved animal health.

A.1.b. Responsibilities of ACVIM Diplomates

Excellence

ACVIM Diplomates will strive to maintain the highest standards of excellence in achieving the purposes of the ACVIM.

Integrity

ACVIM Diplomates will demonstrate honesty and high ethical standards in all professional activities.

Service

ACVIM Diplomates will recognize and affirm their importance to the ACVIM by participating in decision making and serving as volunteers on committees or in leadership roles, both within the ACVIM and their respective specialties.

ACVIM Diplomates will assume leadership roles as advocates of both the ACVIM and their specialty within the communities of the veterinary profession and animal owning public.

A.1.c. Responsibilities of ACVIM Leadership

The leadership of the ACVIM will direct the activities of the ACVIM in keeping with the organization's purposes, and will provide vision to ensure that the ACVIM evolves with the changing needs of its members, the veterinary profession, and the public.

The leadership of the ACVIM will manage the financial resources of the ACVIM to assure the continued financial stability of the organization.

A.2. INTRODUCTION TO THE ACVIM

The American College of Veterinary Internal Medicine (ACVIM) is the American Veterinary Medical Association (AVMA)-sanctioned governing and certifying organization for specialists in veterinary cardiology, large animal internal medicine, small animal internal medicine, neurology, and oncology. The ACVIM was founded in 1972 with 58 charter Diplomates. The ACVIM currently has 2005 Diplomates, of which 1904 are active.

A.3. HISTORY OF THE ACVIM

In 1973, the ACVIM received probationary approval from the American Veterinary Medical Association. The ACVIM's Constitution and Bylaws were approved during the AVMA convention in Philadelphia that same year. Full recognition of the ACVIM by the AVMA was achieved in 1980. In 1981, a central office was established in Blacksburg, Virginia, to manage the rapid growth of the ACVIM. In 1993, the office was moved to Lakewood, Colorado.

From the outset, the ACVIM adopted an "umbrella principle" to accommodate various specialty groups including Cardiology, Neurology, Internal Medicine, and Dermatology.

Following approval by the AVMA, Medical Oncology was added in July 1988. The dermatology group withdrew from the ACVIM in 1982 and established the American College of Veterinary Dermatology.

The organization experienced steady growth and development throughout its first decade of operation. In 1982, the ACVIM membership decided to establish an annual continuing education forum for the veterinary profession. The First Annual Veterinary Medical Forum was held in New Orleans in 1983. The ACVIM Forum has evolved into one of the veterinary profession's premier continuing education events.

In January 1987, the ACVIM published the inaugural issue of the *Journal of Veterinary Internal Medicine*. Begun as a quarterly publication, the *Journal* was converted to a bimonthly issue in 1989.

In 2002, the Specialty of Large Animal Internal Medicine and the Specialty of Small Animal Internal Medicine were created, replacing the Specialty of Internal Medicine.

B. ORGANIZATIONAL STRUCTURE OF THE ACVIM

Based on the Constitution and Bylaws of the ACVIM, the management and control of the professional and business affairs of the ACVIM are vested in the ACVIM Board of Regents (BOR). All voting ACVIM BOR members are elected and consist of the Chair of the ACVIM BOR, President of the ACVIM, President-Elect, Vice-President, and the Presidents of the Specialties of Cardiology, Large Animal Internal Medicine, Small Animal Internal Medicine, Neurology, and Oncology. In addition to these officers, two At-Large Board members are elected to serve three (3) year terms. An ACVIM Professional Liaison and an Executive Director are hired by the Board to manage the day-to-day operations of the ACVIM. The Executive Director is a non-voting member of the BOR, serving as Secretary/Treasurer and Corporation Secretary. The Professional Liaison is a non-voting member of the BOR, serving in an advisory and consulting capacity for the BOR.

The following standing committees assist in the administration of the ACVIM:

- General Examination Committee
- Forum Program Committee
- Constitution Committee
- Nominating Committee
- Appeals Committee
- Specialty Residency Training and Credentials Committees
- Specialty Examination Committees

The Chair of the ACVIM BOR may appoint additional board committees to assist in the administration of ACVIM affairs as needed. All of the specialties under the ACVIM umbrella operate under the Constitution and Bylaws of the central organization. However, each specialty also has its own Bylaws that conform to ACVIM policies and has its own officers and committees that are responsible for managing the specialties' day-to-day affairs. The ACVIM BOR recognizes that each specialty is unique and therefore allows latitude in how the various groups conduct their affairs.

The information included in this ACVIM General Information Guide (GIG) is a summary of the policies and procedures that govern the ACVIM. Specific information not covered in the GIG is available from the ACVIM office:

American College of Veterinary Internal Medicine
1997 Wadsworth Blvd., Suite A
Lakewood, CO 80214-5293
Phone: (800) 245-9081 (toll free in USA and Canada)
(303) 231-9933
FAX: (303)-231-0880
Website: www.ACVIM.org
E-mail: ACVIM@ACVIM.org

C. ACVIM MEMBERSHIP CATEGORIES

An ACVIM Diplomate shall be a member of one or more specialty groups of the ACVIM.

Charter ACVIM Diplomates

The ACVIM BOR invited recognized leaders in veterinary internal medicine to become ACVIM Charter Diplomates when the ACVIM was founded. Additional ACVIM Charter Diplomates may be considered when new specialties are formed.

Active ACVIM Diplomates

Active ACVIM Diplomates are approved by the ACVIM BOR after having fulfilled the prescribed credentials requirements and having passed the General and Specialty Examinations.

Inactive ACVIM Diplomates

ACVIM Diplomates who do not remain current on their payment of annual dues will be considered Inactive members. Active status can be resumed by paying all dues in arrears, to a maximum of three (3) year's dues. Inactive ACVIM Diplomates lose the following benefits: the ability to serve as a Resident Advisor or Supervising Diplomate; the right to vote, hold office, and attend business meetings of the ACVIM (and their respective specialty); the subscription to the *Journal of Veterinary Internal Medicine*; ACVIM Diplomate discount on ACVIM Forum registration; listing as an ACVIM Diplomate in the ACVIM Directory and the AVMA Directory; and other privileges deemed appropriate by the ACVIM BOR.

Honorary ACVIM Diplomates

The ACVIM BOR may confer Honorary ACVIM Diplomate status on persons who have contributed materially to the disciplines of veterinary internal medicine that are part of the ACVIM. The intent of this recognition is for those nearing retirement or who are retired. Honorary ACVIM Diplomates shall have all the rights and privileges of ACVIM Diplomates except: the ability to serve as a resident advisor or supervising ACVIM Diplomate; the right to vote, hold office or attend regular business meetings of the ACVIM.

Retired ACVIM Diplomates

An ACVIM Diplomate can request a retired status within the ACVIM by petitioning the ACVIM BOR. A retired ACVIM Diplomate is an ACVIM Diplomate who has retired from veterinary medical related activities as a source of income and is no longer in employment in which their ACVIM credentials are a requirement for their employment. A "retired" ACVIM Diplomate is subject to the following:

1. No longer required to pay dues;
2. May not vote or hold an ACVIM office.
3. May not serve as a Resident Advisor or Supervising Diplomate in an ACVIM-approved residency program.

Disabled ACVIM Diplomates

An ACVIM Diplomate can request a permanently or a temporarily disabled status within the ACVIM by petitioning the ACVIM BOR. A permanently disabled ACVIM Diplomate is "one who certifies that he/she is permanently disabled and can no longer engage in veterinary activity as a full-time occupation." (AVMA Bylaws Article 1, Section 6). A temporarily disabled ACVIM Diplomate is one who certifies that due to a temporary medical disability he/she cannot currently engage in veterinary activity as a full-time occupation. A "disabled" ACVIM Diplomate is subject to the following:

1. No longer required to pay dues;
2. May not vote or hold an ACVIM office.
May not serve as a Resident Advisor or Supervising Diplomate in an ACVIM approved residency program.
3. A temporarily disabled ACVIM Diplomate, upon their return to full-time veterinary activity, may petition the ACVIM BOR for a return to Active ACVIM Diplomate status. Upon approval by the ACVIM BOR, such status is conferred on payment of that year's dues.

D. GENERAL INFORMATION

D.1. Admission Process

D.1.a. Admission Requirements

ACVIM Diplomates must fulfill the following general requirements:

- D.1.a.1 Be a graduate of a college or school of veterinary medicine approved by the AVMA, or possess a certificate issued by either the Educational Commission for Foreign Veterinary Graduates (ECFVG) or the Program for the Assessment of Veterinary Educational Equivalence (PAVE) **OR** be legally qualified to practice veterinary medicine in some state, province, territory, or possession of the United States, Canada or another country.”.
- D.1.a.2. Have demonstrated unquestionable moral character and impeccable professional behavior.
- D.1.a.3. Complete a one (1) year rotating internship in medicine and surgery or equivalent broad-based clinical experience.
- D.1.a.4. Satisfactorily complete an ACVIM approved residency program in the specialty in which the candidate seeks certification.
- D.1.a.5. Pass the general examination.
- D.1.a.6. Submit acceptable credentials to the specialty in which the candidate seeks certification.
- D.1.a.7. Pass the specialty examination in the specialty in which the candidate seeks certification.

D.2. General Certification Process

D.2.a. Registration

Anyone who intends to become certified in cardiology, large animal internal medicine, neurology, oncology, or small animal internal medicine must register with the ACVIM office within ninety (90) days of beginning his/her program (e.g. by October 1 for residencies beginning July 1) and pay a one-time registration fee to partially cover administrative expenses incurred throughout the certification process. The purpose of registration is to ensure that a candidate embarks on a training program that conforms to the requirements of the specialty in which he or she eventually wishes to become certified. **Failure to register or delayed registration will jeopardize the candidate's certification process.** The rules and regulations, as specified in the GIG, in effect at the time the candidate registers will apply for the duration of that certification process, unless a change in the requirements is specifically made retroactive. If a candidate registers for certification in a second specialty, the rules in effect at the time of the second registration will be in effect for that new specialty.

D.2.b. Procedure

- D.2.b.1. A candidate should obtain a registration form from the ACVIM website (www.ACVIM.org).

D.2.b.2 Within ninety (90) days of beginning a residency program, the candidate must complete the ACVIM Candidate Registration Form and send it to the ACVIM office with the appropriate registration fee.

D.2.b.3. The candidate will receive confirmation of receipt of the registration materials and an assignment of a unique identifying number within eight (8) weeks of the deadline for application. This unique identifying number will be used by the candidate for access to information, including examination results, throughout their certification process. All residency programs should be approved prior to the resident starting the program. Failure to do so will result in the time served prior to the program's approval being disallowed for certification.

D.2.b.4. If a candidate wishes to change training emphasis and become certified in a specialty other than the one in which the candidate is registered, the candidate must re-register by notifying the ACVIM office. The appropriate ACVIM Residency Training Committee will then rule on the acceptability of the candidate's credentials, including the relevance of any training that has already been completed.

D.2.b.5. Should a candidate wish to become certified in more than one ACVIM specialty, the candidate must indicate multiple registrations at the time forms are submitted and must satisfy the requirements of each specialty. Each component of the training program may only be counted toward the requirements of one of the specialties. A separate registration fee is required for each specialty.

D.2.b.6. A candidate in a non-traditional training program (one not previously approved as a "standard" program) must be sure his/her program is approved prior to starting the residency. The Program Director should submit a program registration form to the appropriate Specialty Residency Training Committee for review and written approval of the program at least ninety (90) days prior to the beginning of the training period. Guidelines for an acceptable program and Residency Training Registration materials are available on the ACVIM website (www.ACVIM.org). The program registration form must include a statement from the Resident Advisor and each Supervising Diplomate confirming his/her participation in the program and specifying obligations of the Diplomate to the candidate. The Residency Training Registration Form must be accompanied by an ACVIM Authorized Agent letter stating that the ACVIM will correspond with only the Supervising Diplomate of a program. **Failure to have a program approved in advance will jeopardize the certification process and/or result in time spent in training prior to approval being disallowed for certification.**

D.2.c. Specialty Residency Training

Each specialty has a Residency Training Committee (RTC) that specifies training criteria that must be met for certification. This committee will review all training programs, both traditional and non-traditional, submitted by institutions (Residency Training Registration Form, see D.2.c.1 below) and residents, and rule on their acceptability. The ACVIM office and each specialty's RTC will maintain a registry of ACVIM approved training programs.

Registration materials (referenced in D.2.c.1) for programs can be obtained from the ACVIM website and must be submitted for review at least ninety (90) days prior to the scheduled start of any resident. The RTC will respond within forty five (45) days of receipt of the registration materials.

All programs must be approved prior to any residents actually starting the training program. Update materials referenced in D.2.c.2 will be sent to the Program Director from the ACVIM office by January 15 of each calendar year and the institutions must return the completed forms by March 1. Returned forms will be forwarded to the appropriate Specialty RTC for their review/approval. Failure to submit the appropriate information by the deadline published in the GIG will result in a program being placed on probation and will jeopardize the ability of a resident to count the time on probation toward their certification requirements if the program is placed on suspension. If a program (whether in good standing or on probation) does not respond to an RTC's request for documentation regarding their residency within thirty (30) days of the request, that program will be suspended (terminated). If a program is either placed on probation or suspended, the ACVIM will notify both the Program Director and all residents currently in the program of the action against the program. If a program is suspended, it may not be renewed. A previously suspended program may apply as a new program; however any time served by a resident under the suspended program will not count towards residency completion.

Once a program has been approved, even if its requirements exceed the minimum requirements as published in the GIG, the requirements specified in the program description have become the official requirements for completion of the residency. Neither a candidate nor a Program Director may retroactively petition for successful completion of a residency that has met the minimum requirements of the GIG if they have left the program but have not completed all requirements of the previously approved program.

D.2.c.1. Registration materials (Residency Training Program Registration Forms) and Authorized Agent Letter, specific for each specialty may be obtained from the ACVIM website (www.ACVIM.org) and must be completed and submitted for approval by the appropriate RTC at least ninety (90) days prior to any resident starting the training program.

D.2.c.2. If any portion of the residency is completed at a separate location from the primary site of the residency, the candidate is required to obtain the written approval of the supervising diplomate for each off-site rotation, and documentation of this approval must be forwarded to the RTCC.

D.2.c.3. All approved residencies must be completed within a five (5) year period of active training. To allow for leaves of absence from a training program, all programs must be completed within eight (8) years from the beginning of their residency, e.g. a resident may potentially have up to three (3) years for a leave of absence. Completion of the residency is defined as receipt of the Residency Certificate.

D.2.c.4. The Program Director for each institution will be responsible for updating the ACVIM Program Registration Form by March 1 each year. Failure to provide the annual update to the Residency Training Registration Form and Authorized Agent Letter will result in either probation or loss of the program's approved status. If a program's annual update is submitted late, the program will automatically be placed on probation. Notification of probation will be by a certified letter and e-mail from the ACVIM office to the Program Director. Failure to correct the deficiencies identified within thirty (30) days of receipt of the letter will result in suspension (termination) of the program. Once

suspended, the program will have to re-register as a new program. Once suspended, the time spent by residents in training in that program while on suspension will not be recognized. It will be the charge of each specialty's RTC to determine if the time spent prior to suspension will be counted towards the residency program if it is approved after re-application.

D.2.c.5 Any substantive changes in a program, e.g. changes in the Program Director, Resident Advisor(s), Supervising Diplomate(s), or other significant deviation in availability of program personnel for direct supervision of the Resident, that might result in a program's inability to meet the minimum requirements established by the Specialty Diplomate must be submitted to the appropriate Residency Training Committee for approval prior to implementation of those changes. Failure to do so will result in the program being placed on probation until a detailed review of the program is completed. The time spent by a resident in a program on probation will not count toward the completion of his/her residency if the review results in the program being suspended.

D.2.c.6 The ACVIM, acting through the individual specialty's Residency Training Committees, has the right to revoke the approval of any Residency Training Program. A Residency Training Committee has the right to request that the ACVIM BOR restrict an ACVIM Diplomate from serving in a training or administrative role in response to prior failures in training or administrative functions.

D.2.d Research Requirements

In recognition of the importance of scientific discovery as a critical mission of the ACVIM, all Residency Training Programs shall include an assessable period of instruction and/or participation in creative scholarship that will foster an appreciation of, competency in, and contribution to the knowledge base of their respective specialty and which will support their development as clinician scientists. This requirement is fulfilled through satisfactory completion of the following:

D.2.d.1 Journal Club: Routine and regular participation in a critical review of the literature, e.g. journal club; an eighty (80) hours minimum during the residency training program.

D.2.d.2 Additional Options: In addition to the Journal Club requirement, which is essential to all residencies, successful completion of any one of the options listed below will fill the remainder of the requirements for Section D.2d

- Successful completion of at least two (2) of three (3) short courses/workshops recognized by the ACVIM and covering the following subjects:
 - Critical evaluation of the veterinary medical/biomedical literature
 - Grant-writing
 - Study design and participation in clinical trials
 - These courses may be offered at the ACVIM Forum (where they will be identified as appropriate courses in the Grid), as on-line courses, or at other institutions.
- Documented (by a letter from the Resident Advisor) submission of a grant proposal
- Acceptance and presentation at a scientific meeting of an abstract (either oral or poster) of original work.

- Documented completion (by a letter from the Resident Advisor) of a prospective research program pertinent to the candidate's specialty.
- Documented completion (by a letter from the Resident Advisor) of a retrospective research project pertinent to their specialty.
- Documented completion (by a letter from the Resident Advisor) of graduate coursework in biostatistics, research methods, and/or research ethics.

D.2.e. Definitions Relating to ACVIM Residency Training*

ACVIM Program Director: The ACVIM Diplomate responsible for overseeing an ACVIM residency-training program at a given site. There may not be more than one Program Director in a specialty at any site. The ACVIM office will direct all correspondence concerning a specialty's program at that site to this individual. The ACVIM Program Director is responsible for disseminating information to the appropriate individuals. It is the Institution's and the ACVIM Program Director's responsibility to notify ACVIM of any changes in a program. Failure to notify ACVIM will place that program in jeopardy of probation or suspension.

Resident Advisor: The ACVIM (or for those specialties which permit such supervision, the European College of Veterinary Internal Medicine (ECVIM) or European College of Veterinary Neurology (ECVN)) Diplomate responsible for that resident's program). This Diplomate will sign all documentation verifying completion of approved program requirements. This Diplomate must be certified in the specialty in which the resident is pursuing certification and is subject to any limitations, e.g. a maximum number of residents, set by that individual specialty.

Supervising Diplomate: Any ACVIM (or in specialties so permitting, an ECVIM or ECVN) Diplomate responsible for direct supervision of a resident while that resident is in clinical training.

Direct Supervision: The Supervising Diplomate and resident are participating in a clinical practice in which both the Diplomate and the resident are on duty interactively and concurrently managing cases. The Diplomate need not personally examine each patient seen by the resident, but must remain physically available for consultation.

Indirect Supervision: The Supervising Diplomate and resident, although participating in a clinical practice together, are not on duty simultaneously and so are not concurrently managing cases. To qualify as Indirect Supervision, the Supervising Diplomate(s) is required to have face-to-face contact with the resident for at least one (1) hour per day for four (4) days per week.

A Training Week: For the purposes of the residency, a week's experience is defined as a minimum of forty (40) hours. A resident may not claim more than one training week in any seven (7) day calendar week. The Specialty of Oncology has defined a training week in greater detail than this; Oncology candidates must comply with the definitions specific to Oncology in Section H.1.a.10.

Experience: Some credentialing requirements must be completed on-site, some may be completed off-site, and some may be completed in a part-time manner.

On-Site Training: For those requirements which require on-site supervision, the Supervising Diplomate and the candidate must be working at the same physical location, e.g. practice, teaching hospital, research laboratory, during the time under supervision. On-site experiences may fall in both the category of Direct and Indirect Supervision.

Off-Site Experiences: Off-site experiences are those in which the candidate and the supervising diplomate do not share a common workspace, but have regular and significant direct communication. An example may be a candidate in a research laboratory where the supervising researcher is only on-site for a portion of each day. Another example would be a candidate who travels to a separate facility from his/her residency for completion of their clinical pathology experience. Off-site experiences may be classified as either Direct or Indirect Supervision, depending on the specific nature of the experience, e.g., a candidate may complete a formal rotation at another training facility with direct supervision.

Part-Time Experiences: Part-time experience is permitted in certain specialties, where cumulative experiences over time may accrue to account for a block of time. An example would be a candidate in Oncology, where the candidate completes their forty (40) hours of clinical pathology rotation in daily allotments of one (1) hour over an eight (8) week period. If a program expects their resident to complete some of their experiences in a part-time basis, it must be clearly stated in the program description at the time of program approval. It is the candidate's responsibility to document their experiences with an activity log, which is signed off on by the appropriate supervisor.

Associated Specialties: When residents are completing required training in associated specialties (such as clinical pathology, radiology, etc.), they must be supervised by a diplomate in that specialty of a college approved by the American Board of Veterinary Specialties or the European Board of Veterinary Specialties or by a specialist or individual who has been recognized and approved by the appropriate specialty's RTC as meeting that specialty's requirements.

* (The above definitions have been accepted by the Specialties of Large Animal Internal Medicine, Neurology, Oncology, and Small Animal Internal Medicine. The Specialty of Cardiology replaces the term "Direct Supervision" with the term "Active Supervision".)

D.2.f. Examination Options

In order to sit for either the general or the specialty examination, a candidate must be in good standing. To be in good standing, a candidate must either be actively enrolled in an approved residency training program or must have successfully completed a residency program. If a candidate leaves a residency, either temporarily (e.g. a leave-of-absence) or permanently, prior to completion of the residency, they are not eligible to sit for any examination until they have resumed their training program and the appropriate specialty's Residency Training Committee has approved their current active status.

A candidate may elect to take the general and specialty examinations the same year or may take the general and specialty examinations in separate years provided the following criteria are met.

D.2.f.1. A candidate wishing to take the specialty examination must first satisfy that specialty's examination prerequisites. Additional requirements for specialty

certification, as described below, do not have their completion linked to the timing of the examination.

D.2.f.1.a. Candidates for the Specialty of Large Animal Internal Medicine may complete the case report and publication requirements of the credentialing process after taking the specialty examination.

D.2.f.1.b. Candidates for the Specialty of Oncology may complete the publication requirement of the credentialing process after taking the specialty examination.

D.2.f.1.c. Candidates for the Specialty of Small Animal Internal Medicine may complete the publication requirement of the credentialing process after taking the specialty examination.

D.2.f.2. Initially a candidate must take the general examination either before or during the same week as the specialty examination.

D.2.f.3. A candidate electing to take the general and specialty examinations at the same time must have completed at least two (2) full years (24 months) of an approved residency training program or its equivalent prior to sitting for the examinations.

D.2.g. General Examination

The general examination is prepared by an ACVIM committee appointed by the ACVIM BOR. Members of the committee will be selected from all specialties within the ACVIM. The general examination is a multiple choice exam consisting of two parts: a general section for all candidates and a large animal or small animal section that candidates select according to their species specialization. The general examination covers all aspects of veterinary internal medicine and must be taken and passed by all candidates seeking specialty certification by any specialty under the ACVIM umbrella. A candidate who fails to pass the general examination may apply to the ACVIM office to retake the examination under the provisions of D.2.j. A person who has previously registered his/her training program with the ACVIM and has had it approved by the appropriate Specialty Residency Training Committee may take the general examination if the following are fulfilled:

D.2.g.1. A candidate must, have completed at least eighteen (18) months of an ACVIM approved residency program; either traditional or non-traditional, before the date of the General Examination they apply to take. Applications are due in the ACVIM office no later than October 1 of the year immediately prior to the year of the general examination.

D.2.g.2. In order to take the general examination, the following items must be submitted:

- (a) A letter from the Resident Advisor verifying satisfactory progress in the training program;
- (b) A non-refundable general examination fee payable to the ACVIM with a current Candidate Fee Remittance form (available on the ACVIM website); and
- (c) Two original multiple-choice questions submitted by the candidate suitable for use in future general examinations. (The questions will be added to the question banks but will not be used on the examination the year following submission.) Two copies of the questions must be sent to the ACVIM office along with the Resident Advisor letter prior to October 1 of the year preceding the exam. The examination fee and current Candidate Fee

Remittance form must be submitted to the ACVIM office prior to February 1 of the year in which the candidate is taking the examination. It is the candidate's responsibility to verify that they are registered for the general examination. A candidate who is not on the list of registered candidates will not be admitted to the general examination.

The following criteria must be followed for the questions:

One question must be for the general section and the other for either species-specific section (small animal or large animal). The general section question should address information common to all species including physiology, pharmacology and disease-related information (e.g. pathophysiology, clinical pathology, diagnosis and treatment).

Each submitted question must follow the guidelines for writing examination questions of the American Board of Internal Medicine. These guidelines are available on the ACVIM website. The examination and the category for which the question is intended must be clearly noted (candidates receive a list of categories). All questions must be typed on separate sheets of paper and the correct answer marked and referenced.

References for the general section must be either species non-specific, e.g. a general physiology textbook, or include a small animal and large animal reference. The reference must be from the latest available edition of a textbook and must include the title of the text, editor/author and page numbers. Candidates receive a recommended reading list, and references used should be taken from this list.) The only journal articles acceptable as references are review articles from the *Journal of Veterinary Internal Medicine* published within the preceding five (5) years. References applicable only to human medicine, e.g. human medical textbooks or *The New England Journal of Medicine*, are not acceptable.

Questions not meeting the specifications supplied to the candidates will be rejected, and the candidate will not be allowed to sit for the General Examination that year.

D.2.g.3. A candidate may elect to take the general and specialty examinations in separate years or may take the general and specialty examinations in the same year provided the criteria stipulated in D.2.e. are met.

D.2.g.4. The general examination will be given at the site of the annual ACVIM Forum or at another site approved by the ACVIM BOR.

D.2.h. Specialty Examinations

D.2.h.1. Each specialty has established credentials requirements, some or all of which must be satisfied before the candidate may take the specialty examination. Each specialty's examination will be developed, administered and graded by the appropriate Specialty Examination Committee and rated by ACVIM Diplomates within each specialty. It is the applicant's responsibility to request application/credentials packets from the ACVIM office or find them on the ACVIM website (www.ACVIM.org).

A candidate intending to take a specialty examination must submit his/her credentials, including letters of reference, to arrive by the deadline established by each particular specialty. Each specialty will also designate the criteria a candidate must meet in order to submit his/her credentials. Each candidate will

be notified no later than Sixty (60) days after the submission deadline as to the acceptability of the submitted credentials.

All candidates, other than those in Large Animal Internal Medicine (LAIM), planning to take the specialty examination for the first time whose submitted credentials are accepted, whether that year or in a previous year, must submit a Candidate Fee Remittance form and an examination fee by **February 1** of the year in which he/she plans to take the specialty examination. **All LAIM candidates' credentials will be due on July 1 and the Candidate Fee Remittance form and the specialty examination fee will be due on October 1 of the year preceding the date of the specialty examination, e.g. a candidate planning to sit the specialty examination January 2010 will submit their credentials July 1, 2009 and their Candidate Fee Remittance form and pay their fee October 2009.**

Failure to register by the deadline will make the candidate ineligible to take the specialty examination that year. Effective July 1, 2007, it is a candidate's responsibility to verify that they are registered for the specialty examination. Any candidate who is not on the list of registered candidates will be denied admission to a specialty examination.

D.2.h.2. Candidates may submit credentials following completion of twenty two (22) months of a residency, or the equivalent time in any other approved residency (provided they are in the final year of that program). A previously ACVIM-Board-certified individual having registered in a subsequent ACVIM-approved residency may submit credentials within the final twelve (12) months of that training program. A candidate must submit his/her application, credentials documents and a non-refundable fee, to arrive by the deadline specified by the particular specialty. For all specialties the credentials documents and fee should be sent to the ACVIM office. The credentials processing fee is a one-time fee per specialty.

D.2.h.3. After having successfully passed the components of the credentials process required by the specialty in order to take their specialty examination, a candidate must submit a Candidate Fee Remittance Form and pay an examination fee. For all examination candidates in Cardiology, Neurology, Oncology and Small Animal Internal Medicine, this fee is due on February 1 of the year in which the candidate plans to take the examination. For all examination candidates in Large Animal Internal Medicine, this fee is due on October 1 of the year prior to when the candidate plans to take the examination (i.e. October 1 for the January exam). For candidates retaking the examination, see section D.2.j. below for timelines. An additional fee will be charged for each re-examination.

D.2.i. Fees

The credentials fee is paid at the time the credentials are submitted and the examination fee is paid after the credentials are accepted and before sitting for the examination. Persons whose credentials previously were not approved and are re-applying do not pay an additional credentials fee. Persons whose credentials are approved but who are repeating the specialty examination must pay an additional examination fee.

Fee amounts shall be determined annually by the ACVIM BOR. Fees may be paid by US bank check (US funds) or by MasterCard or Visa.

Details regarding payment of the various fees are addressed under each section dealing with the specific portion of the certification process.

D.2.j. Procedure for Re-application After Examination Failure

In order for a candidate to retake any examination that they previously failed (whether the general examination, the specialty examination, or both examinations), that candidate must complete and submit a Current Candidate Fee Remittance Form (available on the ACVIM website) to the ACVIM office and pay the appropriate fees. For these candidates, the Current Candidate Fee Remittance Form and fee are due in the office no later than February 1 of the year in which the examination is to be retaken for the Cardiology, Neurology, Oncology and Small Animal Internal Medicine exams. For candidates retaking the General Examination and the Large Animal Internal Medicine specialty exam, the Current Candidate Fee Remittance Form and fee are due on October 1 of the year prior to when the candidate plans to take the examination (i.e. October 1 for the January exam (LAIM) and June exam (General Exam)).

D.3. Notification Process

Individual candidates will be identified only by the unique Identification Numbers assigned them by the ACVIM office at the time they register until the results of the examination are approved by the ACVIM BOR. The Specialty Examination Committee Chairs will notify the specialty Presidents of the results of the examination. Results subsequently will be presented by the Examination Committee Chairs to the ACVIM BOR for approval. Written notification of the results of the examination will be sent to candidates within forty five (45) days from the date of the examination.

D.4. Appeals

D.4.a. Appeals Committee

The Chair of the ACVIM BOR shall appoint one ACVIM Diplomate from each of the specialties to serve as the voting members of the ACVIM Appeals Committee. The ACVIM Professional Liaison and Executive Director will serve as ex-officio members of this committee.

When an appeal is filed, the Appeals Committee Chair organizes and conducts a telephone conference call with the Committee membership to review the appeal and render a decision on administrative procedures. The Committee is charged solely with determining whether proper procedure has been followed in the decisions made by the various Specialty Training, Credentials, and Examination Committees. The Appeals Committee will base its decision on whether the Committees have ruled erroneously by:

- a. Disregarding established criteria for certification or approval;
- b. Failing to follow stated procedure;
- c. Failing to consider relevant evidence and documentation presented by the candidate.

D.4.b. Appeals Process

Either a candidate or a Program Director who has received a negative decision and who believes that proper procedures have not been followed by a Specialty's Residency Training, Credentials, or Examination Committee may appeal that decision.

Appeals must be submitted in writing to the ACVIM office. Appeals should consist of a brief letter summarizing the reason for the appeal, along with any supporting documents. Appeals must be received by the ACVIM office within thirty (30) calendar days of the specialty committee's notification to the Program Director or the candidate of the decision being appealed. When an appeal is received, the Executive Director shall notify the Chair of the ACVIM BOR, the appropriate specialty President, the Chair of the appropriate Specialty Examination or Credentials Committee and the members of the Appeals Committee. The Chair of the appropriate Training, Credentials or Examination Committee shall submit to the Appeals Committee all data relevant to the appeal and a letter summarizing the reasons for the committee's decision. The Chair of the Appeals Committee will call a meeting to review an appeal and notify the Chair of the ACVIM BOR, the ACVIM Professional Liaison and the Executive Director of the results of that review within thirty (30) calendar days of the receipt of the appeal by the ACVIM office. The ACVIM Professional Liaison will notify the Program Director or candidate of the Appeal Committee's decision.

There shall be no appeals of this committee's decision within the ACVIM. However, a Program Director or candidate can appeal a decision of the ACVIM Appeals Committee by requesting mediation through the American Board of Veterinary Specialties (ABVS) of the AVMA.

D.5. ACVIM DIPLOMATE Certificates

D.5.a. Issuance of ACVIM Diplomate Certificates

In addition to passing both examinations and completing ALL specialty credentialing requirements, the candidate must submit to the ACVIM office a copy of his/her residency training certificate or a letter from the Program Director stating that the candidate has satisfactorily completed the approved residency training program prior to receiving his/her ACVIM Diplomate Certificate. This letter from the Program Director must state the actual date that the residency was completed, that date must conform to the end-time stated in the approved residency form on file in the ACVIM office, and the letter cannot be submitted prior to the actual completion date of the residency. Additionally, candidates for the Specialty of Large Animal Internal Medicine must provide documentation that they have completed the case report requirement of the credentialing process as appropriate for that specialty. Candidates for the Specialty of Large Animal Internal Medicine, the Specialty of Small Animal Internal Medicine and the Specialty of Oncology also must provide documentation that they have completed the publication requirements of the credentialing process as appropriate for each specialty. The ACVIM Diplomate Certificates will not be awarded until all requirements are met. The ACVIM office will prepare these Certificates and publish lists of new ACVIM Diplomates. ACVIM Diplomate Certificates will be awarded at a time and place as determined appropriate by the ACVIM BOR.

D.5.b. Repossession of ACVIM Diplomate Certificates

ACVIM Diplomate Certificates shall always remain the property of the ACVIM and shall be repossessed when:

D.5.b.1. The issuance of such an ACVIM Diplomate Certificate or its receipt by the ACVIM Diplomate shall have been contrary to, or in violation of any provisions of, the ACVIM's Constitution and Bylaws; or

D.5.b.2. The ACVIM Diplomate fails to maintain an acceptable degree of competence in the practice of veterinary internal medicine or one of its Specialties.

Reinstatement is contingent on the approval of the ACVIM BOR, payment of all dues in arrears, and payment of current dues in full.

E. SPECIALTY OF CARDIOLOGY**Summary of Procedures for Candidate Certification
ACVIM, Specialty of Cardiology****Registration**

Send to: ACVIM Office
When: Within Ninety (90) days of beginning Residency Training Program
What: Registration Packet, Candidate Fee Remittance Form and
 Registration Fee
Reviewed by: Cardiology Residency Training Committee
Response time: Eight (8) weeks

General Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Resident Advisor progress letter, two multiple-choice questions
 and Candidate Fee Remittance Form and General Examination Fee
Reviewed by: ACVIM Office
Response time: Thirty (30) days

Credentials for Specialty Examination

Send to: ACVIM Office
When: By December 1 of the year preceding the examination
What: Credentials Packet, Candidate Fee Remittance Form and
 Credentials Fee
Reviewed by: Credentials Committee
Response time: Sixty (60) days

Registration and Fee for Taking the Specialty Examination

Send to: ACVIM Office
When: By February 1 of the year of the examination (for a candidate re-
 taking the examination – see section D.2.j for your deadlines)
What: Candidate Fee Remittance Form and Specialty Examination Fee
Reviewed by: ACVIM Office and Cardiology Credentials Committee
Response Time: Thirty (30) days

Appeals

Send to: ACVIM Office
When: Within thirty (30) days of notification to the candidate
What: Brief letter summarizing the basis for the appeal
Reviewed by: ACVIM Appeals Committee
Response by: ACVIM Professional Liaison
Response time: Within thirty (30) days of receipt of appeal

- E.1. Guidelines For Registered Cardiology Residency Programs** (In addition to the specialty specific guidelines listed below, all candidates must meet the general requirements of the ACVIM as spelled out in Sections D.1 and D.2 of the GIG above).

E.1.a. Description of the Program

E.1.a.1. Duration

The residency program must be at least twenty four (24) months in length

E.1.a.2. Registration

Each resident must register with the ACVIM office (see D.2.a. and D.2.b of the GIG)

E.1.a.3. Environment

The program must be at an ACVIM-approved veterinary medical facility with a recognized program in cardiology (which includes an ACVIM Cardiology Diplomate (s)) and a strong faculty/staff active in a variety of disciplines and specialties. Each program must be registered with and approved by the Cardiology Residency Training Committee (CRTC). Cardiology training must be actively supervised for at least eighteen (18) months by at least one ACVIM-certified Diplomate in Cardiology or an approved ECVIM Diplomate in Cardiology. ACVIM approved programs with ECVIM Diplomates in Cardiology as Program Director or Resident advisor must be based in the United States or Canada.

E.1.a.4. Secondary Training Sites

Secondary training sites constitute Off-Site Training experiences that may be used to provide access to required procedures and to enhance training. Secondary training supervisors must be ACVIM or approved ECVIM diplomates in Cardiology and are expected to provide Direct Supervision.

E.1.a.4.a. Secondary site supervisors must submit a letter of intent with the residency proposal to the Residency Training Committee at the time of program application stating reason and proposed duration of secondary site training. The secondary site supervisor may indicate in the letter of intent that the offer applies to a single trainee, or that the secondary site supervisor intends the agreement to remain in effect until rescinded by the Residency Supervisor or the secondary site supervisor.

E.1.a.4.b. The secondary site supervisor must sign the trainee's case log for any required procedures at the time of performance of these procedures.

E.1.b. Program Supervision

E.1.b.1. The Program Director, Resident Advisor, and Supervising Diplomate of all cardiology residency training programs must either be an ACVIM (Cardiology) Diplomate or an approved ECVIM diplomate certified in the Specialty of Cardiology. Any secondary site supervisor(s) must be diplomates in their respective specialties and approved for their specific programs by the Residency Training Committee of the ACVIM Specialty of Cardiology.

E.1.b.2. Each approved program must comply with all requirements as specified in Section D.2.c of the GIG (see above).

E.1.c. General Objectives

The residency program must provide intensive training in clinical cardiology, including major responsibility for the care of patients with cardiovascular disease. Minor emphasis should be placed on training in internal medicine, either by primary patient care, or by attendance at rounds or medical conferences in internal medicine. The candidate should acquire a broad working knowledge of anatomy, physiology, and pathology of all body systems, and in-depth knowledge of the cardiovascular system in health and disease. Clinical training in most programs is likely to emphasize small animal practice, but experience with other species is strongly encouraged. While the overall balance of small and large animal experience may vary based on the location of the training site and the interest of the trainee, broad-based training in veterinary cardiology is a major goal of the residency program. During a residency program in veterinary cardiology, the candidate should obtain knowledge and understanding in:

E.1.c.1. General internal medicine.

E.1.c.2. Physical and laboratory diagnosis, management and prognosis of cardiovascular disease of all domestic animals.

E.1.c.3. Basic sciences (anatomy, biochemistry, physiology, pharmacology, pathology) of the cardiovascular system in health and disease.

E.1.c.4. Recording and interpretation of specialized laboratory studies used in the evaluation of cardiovascular disease. These include:

E.1.c.4.a. Electrophysiologic studies - electrocardiography, vectorcardiography, intracardiac (His-bundle) recordings, cardiac pacing.

E.1.c.4.b. Cardiovascular sound - auscultation, phonocardiography, echophonocardiography.

E.1.c.4.c. Graphic methods - pulse and pressure recordings.

E.1.c.4.d. Hemodynamics - cardiac catheterization techniques, interpretation of pressure tracings, indicator dilution studies, blood gases and oximetry.

E.1.c.4.e. Cardiovascular radiography, including angiography and other contrast studies.

E.1.c.4.f. Endomyocardial biopsy techniques.

E.1.c.4.g. Echocardiography - M-mode, two-dimensional, and pulsed, continuous-wave, and color flow Doppler examinations.

E.1.c.4.h. Nuclear Cardiology - understanding the principles of radioisotopic studies of perfusion, cardiac dynamics, and shunts.

E.1.d. Specific Training Objectives and Requirements

The residency program must provide the trainee with adequate practical experience in invasive and non-invasive cardiac diagnostic techniques, as well as a suitable clinical case experience, to ensure clinical proficiency. **To document this experience, a case log of required procedures must be maintained including salient information about the patient and procedures. The ACVIM (Cardiology) or approved ECVIM Cardiology Diplomate supervising the individual procedure must provide a signature documenting their supervision of the procedure. A summary table must be included at the end of the case log indicating the total number of catheterizations and echocardiograms performed.** A copy of this case/procedure documentation log can be obtained at the onset of training from the ACVIM website or by writing to the ACVIM office. Specific requirements during the residency include:

E.1.d.1. Catheterizations

Performance of at least fifteen (15) supervised cardiac catheterizations. For the purpose of these guidelines, cardiac catheterization procedures are defined as diagnostic catheterization and selective angiocardiology, balloon valvuloplasty, endomyocardial biopsy, permanent transvenous cardiac pacing, placement of Swan-Ganz catheters with subsequent hemodynamic monitoring, placement of intravascular occlusion devices or embolization coils, heartworm extraction, and invasive electrophysiologic studies or radiofrequency ablation. "Performance" of the required procedure is defined as the trainee's active participation in the procedure. Simple observation of the required procedures is NOT adequate to fulfill the catheterization requirements. No one procedure can account for more than four (4) of the fifteen (15) total procedures to fulfill this requirement. For example, a candidate may implant more than four (4) pacemakers during the residency, but only four (4) would count toward this requirement and other procedures would be needed. Procedures that involve multiple techniques such as diagnostic catheterization, selective angiography, and an intervention (e.g. balloon valvuloplasty or coil embolization) could be counted in any one (1) category. In other words, a candidate who performed eight (8) balloon valvuloplasties could count four (4) of them as balloon valvuloplasty, and four (4) of them as diagnostic catheterizations. This is the minimum number of acceptable procedures and true proficiency is likely to require more than this minimum standard.

E.1.d.2. Echocardiograms

Recording and interpretation of at least two hundred (200) echocardiograms (including M-mode, 2D, and Doppler studies).

E.1.d.3. Conferences

Bi-weekly attendance at a human cardiology conference, or a two-week, full-time rotation in a human cardiology facility.

E.1.d.4. Special Procedures

Theoretical training in the principles and application of radionuclide angiography, magnetic resonance imaging, digital subtraction angiography, and invasive electrophysiologic testing. Practical training in these areas is desirable if facilities and equipment are available.

E.1.d.5. Case Management

Given a clinical case with cardiovascular disease, the candidate should be able to evaluate the patient in a logical and skillful manner. The trainee should be able to:

- E.1.d.5.a. Obtain and interpret the patient's history and conduct a complete physical and cardiovascular examination.
- E.1.d.5.b. Develop a differential diagnosis, including both etiologic and pathologic (anatomical and physiological) diagnoses.
- E.1.d.5.c. Suggest appropriate laboratory studies to confirm or rule out each possible diagnosis.
- E.1.d.5.d. Perform and interpret laboratory studies.
- E.1.d.5.e. Make a presumptive or definitive diagnosis based on accumulated data.
- E.1.d.5.f. Outline and explain the rationale for appropriate treatment, including alternative therapy, and render a prognosis.
- E.1.d.5.g. Understand the principles of cardiovascular surgery and interventional cardiac catheterization (e.g. balloon valvuloplasty). [The ability to perform the procedures is useful, but not required.]
- E.1.d.5.h. Communicate clearly to the client the diagnosis, prognosis and recommended management of the patient's problem.
- E.1.d.5.i. If a candidate fails to fulfill the criteria in Sections E.1 through E.4.f., the candidate will have to make up the deficit and resubmit credentials.

E.1.e. Patient Care

The number of cases seen during the training program will vary among training sites. **At all training sites the majority of case material must emphasize cardiac disorders.** Emphasis should be on quality rather than quantity, although a sufficient caseload must be available to provide experience with all types of cardiovascular disease in as many different species as possible. Outside rotations at other training sites should be considered when appropriate in order to fulfill training requirements or to obtain additional large animal or small animal case experience. The resident should have the primary care responsibility for cases, which should involve receiving, diagnosis, management and client communication. The opportunity for consultation with Diplomate(s) certified in the Specialty of Cardiology (either ACVIM or approved ECVIM) and others must be readily available. Patient care should constitute 65-75% of the resident's time. The resident should also be available for consultation with other members of the hospital faculty and staff.

E.1.f. Consultation and Supervision

Cases under the care of a cardiology resident should be reviewed regularly by either an ACVIM (Cardiology) or an approved ECVIM Cardiology Diplomate. Consultation with other qualified individuals should be encouraged, but cannot replace regular review by a Diplomate certified in the Specialty of Cardiology. Exposure to comparative medicine, especially participation in programs at medical schools and medical teaching hospitals, is especially desirable and should be encouraged.

E.1.g. Study and Education

In-depth knowledge of a specialty, especially its basic science aspects, cannot be gained by patient care alone. Comprehensive knowledge of the field should be gained by the following methods:

- E.1.g.1. Regular attendance and active participation in seminars, rounds, and case conferences in cardiology and other areas of internal medicine, both at a veterinary hospital and, where possible, at a medical school or medical teaching hospital.
- E.1.g.2. Attendance of at least one major national meeting of a professional society in cardiology (e.g., American Heart Association, American College of Cardiology) is encouraged during the residency.
- E.1.g.3. Experience in teaching the specialty by participation in specialty rounds, presentation of cardiology patients in seminars, and preparation of lectures in cardiology.
- E.1.g.4. Obtaining sufficient time free from clinical responsibilities for attending seminars, developing clinical laboratory research (when possible), and completing relevant course work and self-study. Formal course work, while not a requirement, may be desirable, depending on the availability of appropriate courses, the duration of the program, integration of concurrent graduate degrees, and the background and interests of the resident. Course work should augment, not detract from, clinical training. A structured self-study program should be developed by the resident in consultation with either an ACVIM (Cardiology) or an approved ECVIM Cardiology Diplomate. A comprehensive reading list should be provided by the Supervising Diplomate at the start of the program. This list should include standard texts in veterinary and human internal medicine and cardiology, cardiovascular anatomy, physiology, pharmacology, and pathology as well as appropriate current and past journal articles detailing veterinary and human cardiology. The ACVIM Cardiology Subject Category Study Outline (available from the ACVIM website or the ACVIM office) can be used as a study guide.
- E.1.g.5. Receiving guidance and critical evaluation from the Cardiology Diplomate(s) in the form of consultations, rounds and conferences.
- E.1.g.6. Participating in research, either clinical or laboratory, when available as part of the training program. Such experience is valuable in fostering habits of scholarship and critical thinking; accordingly, development of research projects, including their design, execution, evaluation and publication (while not a requirement) should be encouraged whenever possible.

E.1.h. Facilities and Equipment

E.1.h.1. Minimum diagnostic equipment and facilities should include laboratories for clinical pathology, microbiology, parasitology, pathology (gross and microscopic), radiography, cardiac catheterization and angiocardiology, electrocardiography, phonocardiography and echocardiography. Availability of facilities for other studies, including intracardiac electrophysiology and nuclear medicine, is desirable.

E.1.h.2. Adequate library facilities that provide access to textbooks and periodicals in both human and veterinary medicine are essential.

E.1.i. Masters and Ph.D. Programs

Graduate programs cannot be integrated with a two-year residency program. Extensive course work or research interferes with the clinical training and case management expected of the resident. Therefore, it will not normally be possible to pursue an advanced degree while serving a two-year residency and still satisfy the credentials requirements. Graduate programs integrated into three-year or longer graduate/residency programs may be acceptable. Final approval of a residency/graduate student-training program rests with the Training and Credentials Committee of the Specialty of Cardiology.

E.1.j. Correspondence and Inquiries

All inquiries and requests for registration forms and lists of standard residencies should be made to the ACVIM office. Specialty credentials packets should be obtained from the ACVIM website or by request from the ACVIM office. Credentials packages should be mailed directly to the ACVIM office, attn: Chair of the Cardiology Credentials Committee.

E.2. Guidelines for Non-traditional Cardiology Training Programs

One of the objectives of the Residency Training Committee is to establish criteria for acceptable non-traditional training programs in the Specialty of Cardiology. Applicants engaged in such programs must take great care to assure that their program is acceptable for specialty training and must meet the following criteria, as well as those described in Section E.1.d above and Section D - General Information, in order to qualify to take the general and specialty examinations. The training program should be preceded by at least one (1) year of training (internship or its equivalent) in general medicine.

E.2.a. Approval of the Program

The Program Director must request evaluation of his/her program and obtain written approval from the Cardiology Residency Training Committee prior to initiation of the non-traditional program. Proposed programs must include clinical cardiology specialty practice with the active and regular utilization of non-invasive and invasive diagnostic modalities. Graduate programs in which the principal intent is to receive the M.S. or Ph.D. degree are not suitable non-traditional programs.

E.2.b. Requirements

Regardless of the variances that may be approved, every candidate must complete a minimum one hundred four (104) week training program consisting of:

E.2.b.1. At least eighteen (18) months training under active supervision of either an ACVIM (Cardiology) Diplomate or an approved ECVIM Cardiology Diplomate. While the overall balance of small and large animal experience may vary based on the location of the training site and the interest of the trainee, broad-based training in veterinary cardiology is a major goal of the residency-training program.

E.2.b.2. An additional minimum of six (6) months clinical training supervised by an ACVIM Diplomate of the Specialty of Small Animal Internal Medicine, Large Animal Internal Medicine, or an ABVS recognized specialist in other related disciplines (including hospital affiliations) is required if training under item E.2.b.1 is not extended to one hundred four (104) weeks. Such training must occur at an institution, private specialty practice, or research facility that is predominantly involved with a related discipline of cardiology.

E.2.b.3. Training must include, but is not limited to, clinical rotations, seminars and consultations with specialists. The guidelines and requirements described for standard residencies Sections E.1.c, E.1.d, E.1.e, E.1.f, E.1.g, and E.1.h, are also applicable to non-traditional programs. When not attending seminars or conferences during the training program, the candidate must be actively engaged in the practice of clinical cardiology under the supervision of either an ACVIM (Cardiology) or an approved ECVIM Cardiology Diplomate.

E.2.c. Time in Training

The aforementioned periods of training represent the total amount of time that the candidate must be actively supervised by ACVIM Diplomates. If this active supervision is not continuous, it must be arranged in blocks of time no less than four (4) days per block and a minimum of twelve (12) weeks per year. For example, if a candidate completes the minimum three (3) months training period yearly, the total number of years required to complete an equivalency program would be eight (8) years under provisions E.2.b.1, E.2.b.2, and E.2.b.3.

E.2.d. Documentation

The candidate must have the Approved Program Director in the Specialty of Cardiology (either ACVIM or approved ECVIM) submit to the ACVIM office detailed written documentation supporting the proposed program prior to the starting date of the proposed program. If the program is approved, the Credentials Committee will send a letter of approval to the Program Director. Then each year, by October 1, the candidate or Resident Advisor must submit a letter to the ACVIM office documenting the status of the candidate in fulfilling the requirements listed above in E.2.b. Once all requirements have been fulfilled, the candidate may apply to take the Specialty Examination. Copies of all correspondence with the ACVIM office and Credentials Committee must be included in the application.

E.2.e. Case Log

The candidate must maintain a log of all cardiology cases managed during the eighteen (18) month direct supervision period. This log should contain the date, client name, case number, signalment, final diagnosis, and diagnostic tests used for each case. The Supervising Diplomate should review and sign the log each year. This log will be reviewed by the Credentials Committee at the end of the candidate's training program. The log forms can be obtained from the ACVIM website or by writing the ACVIM office.

E.2.f. Academic Degree Programs

Academic degree programs (M.S., Ph.D.) cannot be substituted for intensive clinical training.

E.2.g. Letters of Reference

At least three confidential letters of reference must be forwarded to the ACVIM office. A letter must be sent by each supervisor involved in the training program. All letters must be from persons intimately familiar with the candidate's training program and be received by the Chair of the Cardiology Credentials Committee before final acceptance of a program. Reference letters must document 1) the verification of residency training and the level of Diplomate supervision, 2) the candidate's proficiency, judgment, and competence as a veterinary Cardiologist and his/her academic readiness to sit for the examination, 3) the apparent commitment of the candidate to the objectives of the ACVIM (cardiology), and 4) the moral and ethical standing of the candidate in the veterinary profession.

E.2.h. Verifying Program Completion

If the proposed program has received prior written approval from the Cardiology Credentials Committee and the annual reviews are satisfactory, the Resident Advisor must forward verification of satisfactory completion of the program to the ACVIM office.

E.3. Procedure for Certification in Cardiology

Candidates may submit credentials following completion of twenty two (22) months of a residency, or the equivalent time in any other approved residency (provided they are in the final year of that program). If a candidate is previously ACVIM Board Certified and participating in an approved Cardiology residency, he/she may submit his/her credentials within the final twelve (12) months of that program. Applicant instructions, specific Specialty Examination details and instructions for meeting the credentials requirements are available upon request from the ACVIM office. The ACVIM office must receive the application and all other supporting materials for the Specialty Examination by December 1 of the year preceding that in which the candidate will write the examination. The candidate will be notified within sixty (60) days of the credentialing deadline whether his/her credentials have been accepted. On or before this date, the following should be submitted to the ACVIM office:

E.3.a. Items to be Submitted by Applicants:

E.3.a.1. A set of questions prepared by the candidate suitable for use in future Specialty Examinations. The purpose of this set of questions is to demonstrate the candidate's level of knowledge in cardiovascular medicine and to demonstrate the candidate's ability to communicate in a scientific manner. A secondary purpose is to allow the candidate's input into future examinations. All questions must be typed and the correct answer referenced. The questions will be graded based on content, level of difficulty, references, and clarity of graphics. A score of between 0 and 5% will be given the questions and the score will be added to the candidate's certifying exam score (0-95%) to give the total score. The questions are also added to the certifying exam bank of questions for future use. Six (6) copies of all questions and accompanying photos/graphics must be sent with the application (high quality photocopies are acceptable) along with an electronic copy of all materials (on a CD or DVD disk). The electronic materials must be submitted in the correct formats as follows: all text material must be in MS Word format; all static images must be in either tif (no compression) or jpg (minimum compression) formats at a

minimum resolution of thirty (30) dpi; video must be submitted in either .avi or .mov formats. The set of questions must include the following:

- Ten (10) multiple-choice questions that must follow the guidelines for writing examination questions of the American Board of Internal Medicine. These guidelines are available on the ACVIM website. These questions must be selected from at least seven different subject areas from the ACVIM Cardiology Subject Category Study Outline (included in the application package from the specialty) with no more than two (2) questions from one subject area. The subject area must be indicated clearly for each question.
- Three (3) essay questions requiring between five and ten minutes to answer. These questions may be selected from any of the topics in the Cardiology Subject Category Study Outline, including those for the multiple choice questions, but not more than one (1) essay question per subject area. The subject area must be clearly identified. A suitable answer, typed, should accompany each question. This answer must be referenced.
- Three (3) neatly mounted electrocardiograms or three high quality, close-up, glossy photographs of ECGs from any species with accompanying questions and answers regarding the interpretation of the ECG. Do not submit your ECGs as slides. Single lead or multiple leads may be submitted as required for interpretation. Paper speed, calibration and lead selection must be included.
- Three questions with accompanying typed answers that require the interpretation of submitted graphic material such as (but not limited to) radiographs, cardiac catheterization data, ultrasound exams, gross or microscopic pathology, or other special studies. Include five (5) copies of the original, a high quality glossy photograph, or 2" x 2" slide of the subject material.
- One digital video recording with accompanying typed answer. This may include echocardiograms, angiograms or other fluoroscopic procedures, or other video examinations.

E.3.a.2. A letter signed by the candidate's Supervising Diplomate and the candidate stating that the candidate did not have any direct aid in writing the questions that the candidate prepared.

E.3.a.3. The appropriate number of copies of the completed cardiology application form as specified in the on-line instructions.

E.3.a.4. Three (3) letters of reference from cardiology associates with whom the candidate has worked during the training program. At least one must be from either an ACVIM (Cardiology) Diplomate or an approved ECVIM Diplomate certified in the Specialty of Cardiology. It is preferred that a second reference also come from either an ACVIM (Cardiology) Diplomate or an approved ECVIM Diplomate certified in the Specialty of Cardiology and the third from an ACVIM Diplomate certified in the Specialty of Small Animal Internal Medicine or Large Animal Internal Medicine. Each referee must send the reference letter or form as directed in the credentials packet.

E.3.a.5. A Candidate Fee Remittance Form must be submitted and Credentials fee may be paid by US bank check (US funds) or by MasterCard or Visa (refer to D.2.i.).

E.3.a.6. A copy of the letter from the ACVIM stating the candidate has passed the general examination should accompany the application if the candidate does not plan to take the general and the Specialty Examinations together in the same year.

E.3.a.7. The candidate should arrange the items in E.3.a.1, E.3.a.2, E.3.a.3, E.3.a.4, and E.3.a.6, in a separate binder for each application form, each containing one of each item. All original items should be included in one binder (Binder #1). The number of application forms is specified in the on-line instructions.

E.4. Cardiology Specialty Examination

The specialty examination in cardiology is a six-part examination taken over two (2) days. It consists of:

E.4.a. Multiple-choice questions (20-25%), covering all aspects of basic and clinical sciences relevant to cardiovascular medicine.

E.4.b. Essay questions (18-25%), also covering both basic and clinical sciences related to cardiovascular medicine.

E.4.c. Case studies (20-25%), consisting of clinical patient studies including radiographs and other non-invasive and invasive examinations (ECG, ultrasound, hemodynamics, angiograms, etc.).

E.4.d. Cardiac Anatomy/Pathology (8-12%), covering gross anatomy, histology, cytology, radiographs, static angiograms, and M-mode echocardiograms.

E.4.e. Physiologic recordings (15-20%), consisting of electrocardiograms, EP studies, phonocardiograms, static spectral and color flow Doppler echocardiograms, hemodynamic studies, special studies, and audio recordings (heart sounds, etc.).

E.4.f. Video (8-12%), consisting of real-time recordings of patient examinations. It may include both non-invasive (M-mode, 2-dimensional, Doppler echocardiograms, transesophageal echocardiograms, etc.) and invasive studies (angiograms, etc.).

The subjects covered in the examination are listed in the ACVIM Cardiology Category Study Outline. This outline can be obtained from the ACVIM website or by request from the ACVIM office. No special equipment is required to write the examination, but candidates may wish to bring, calipers and a watch to assist them in evaluating some material and monitoring time spent on various portions of the exam.

The score given by the Credentials Committee to the candidate's submitted credentials packet will comprise 5% of the candidate's final examination score.

An overall (average) score of 70% or greater is required to pass the examination. A candidate need not achieve 70% or higher on each section of the examination as the overall average is the final determinant. The examination is evaluated and rated by current Diplomates of the specialty.

A blueprint for the examination will be posted on the ACVIM website at least sixty (60) days prior to the examination

F. SPECIALTY OF LARGE ANIMAL INTERNAL MEDICINE**Summary of Procedures for Candidate Certification
ACVIM, Specialty of Large Animal Internal Medicine****Registration**

Send to: ACVIM Office
When: Within ninety (90) days of beginning Residency Training Program
What: Registration Packet, Candidate Fee Remittance Form and Registration Fee
Reviewed by: Large Animal Internal Medicine Residency Training Committee
Response time: Eight (8) weeks

General Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Resident Advisor progress letter, two multiple-choice questions, Candidate Fee Remittance Form and General Examination Fee
Reviewed by: ACVIM Office
Response time: Thirty (30) days

Credentials Packet and Credentials Fee (see specific deadlines in F.2.b for case reports)

Send to: ACVIM Office
When: By July 1 of the year preceding the examination
What: Credentials Packet, Candidate Fee Remittance Form and Credentials Fee and three letters of reference
Reviewed by: Large Animal Internal Medicine Credentials Committee
Response time: Sixty (60) days

Registration and Fee for Taking the Specialty Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination (for candidate re-taking the examination – see section D.2.j for your deadlines)
What: Candidate Fee Remittance form and Specialty Examination Fee
Reviewed by: ACVIM Office and Large Animal Internal Medicine Credentials Committee
Response Time: Thirty (30) days

Appeals

Send to: ACVIM Office
When: Within thirty (30) days of notification to the candidate
What: Brief letter summarizing the basis for the appeal
Reviewed by: ACVIM Appeals Committee
Response by: ACVIM Professional Liaison
Response time: Within thirty (30) days of receipt of appeal

Certification in Large Animal Internal Medicine (LAIM) requires meeting each of the criteria listed below

- 1) **Successful completion of an approved residency training program in LAIM**
- 2) **The candidate attains a passing score on the general examination of the ACVIM**
- 3) **The LAIM Credentials Committee accepts the credentials submitted by the candidate as meeting the requirements to take the Specialty Examination**
- 4) **The candidate attains a passing score on the LAIM Specialty Examination**
- 5) **The candidate completes the publication requirement for the LAIM specialty as specified in the current General Information Guide**
- 6) **The candidate completes the case report requirements for the LAIM specialty as specified in the current General Information Guide**

Each of these requirements is described in greater detail below

F.1. Minimum Requirements for Residency Training Programs in the Specialty of Large Animal Internal Medicine (In addition to the specialty specific guidelines listed below, all candidates must meet the general requirements of the ACVIM as spelled out in Sections D.1 and D.2 of the GIG above).

F.1.a. General Description

F.1.a.1. An acceptable large animal internal medicine residency is a minimum one hundred four (104) week intensive postgraduate clinical training program under the supervision of at least two (2) Diplomates of the ACVIM, one of whom must be a Diplomate in the Specialty of Large Animal Internal Medicine.

F.1.a.2. Each resident must register with the ACVIM office (see D.2.a and D.2.b of the GIG).

F.1.a.3. The large animal internal medicine residency must take place at a specialty clinical facility where the resident will provide primary patient care appropriate to his/her level of training and manage cases in all facets of veterinary internal medicine, utilizing clinical pathology, pathology, radiology, ultrasonography, and endoscopy.

F.1.a.4. If a particular training program cannot provide adequate personnel or facilities to fulfill these requirements, the resident must make special arrangements at other facilities to fulfill any deficiencies.

F.1.a.5. It is possible to achieve certification in the Specialty of Large Animal Internal Medicine in a non-traditional residency-training program, but all of the training requirements must be satisfied. The only allowable differences are that the training may occur at more than one facility and the training may occur in non-contiguous blocks of time over an extended time period (see F.1.b.2-F.1.b.5). The Large Animal Internal Medicine Residency Training Committee must approve non-traditional residency training programs in advance. A candidate and his/her Resident Advisor will be responsible for documenting that the training has occurred as specified.

F.1.b. Direct Supervision During the one hundred four (104 week) Clinical Training Program

F.1.b.1. Refer to D.2.e for definitions relating to residency training.

F.1.b.2. Of the one hundred four (104) week clinical program:

F.1.b.2.a. A minimum of fifty two (52) weeks must consist of intensive clinical training in the Specialty of Large Animal Internal Medicine with the trainee being under direct supervision of an ACVIM Supervising Diplomate in the Specialty of Large Animal Internal Medicine.

F.1.b.2.b. A minimum of sixteen (16) additional weeks must consist of clinical training under the direct supervision of one or more Supervising Diplomates (other than referred to in F.1.b.2.a) in the Specialty of Large Animal Internal Medicine, Small Animal Internal Medicine, Cardiology, Neurology or Oncology. These Diplomates are not required to be certified in the species (small animal or large animal) that pertain to the resident's program. This training can be done:

b-i) As defined blocks of time, such as formal rotations on a specialty service; or

b-ii) On an individual case basis. For example, a resident on a large animal medicine service and supervised by an internist could receive supervision from a Cardiologist regarding management of specific cases. Such supervision by the Cardiologist would partially fulfill this requirement. The determinations of equivalency between case quantity and time spent is the responsibility of the Resident Advisor.

F.1.b.2.c. The remaining thirty six (36) weeks should consist predominantly of clinical training in large animal internal medicine or in related areas, not necessarily under direct supervision of an ACVIM Diplomate. Some time may include assigned rotations in related clinical fields such as dermatology, ophthalmology, surgery, theriogenology, emergency medicine and critical care, clinical nutrition, clinical pharmacology, or anesthesiology. Some time may include non-clinical responsibilities such as writing, studying, teaching or obtaining experience with a radiologist or clinical pathologist. Vacation time and time for attendance at meetings should also be included in this 36-week period.

F.1.b.3. If the one hundred four (104) week clinical training program is not continuous, it must be arranged in blocks of time no less than two (2) weeks per block and a minimum total of twelve (12) weeks per year. Consequently, if the candidate completed the minimum of twelve (12) weeks training per year, a total of eight (8) years would be required to complete a program with the remaining eight (8) weeks considered to be vacation and meeting time.

F.1.b.4. The resident must spend the equivalent of at least forty (40) hours direct contact during the residency with a Board-certified veterinary radiologist interpreting radiographs, learning and evaluating the results of special imaging techniques, and attending radiology rounds and/or seminars.

F.1.b.5. The resident must spend the equivalent of at least forty (40) hours direct contact during the residency with a Board-certified veterinary clinical pathologist or anatomic pathologist evaluating clinical pathologic findings, reviewing cytologies and biopsies, and attending clinical pathologic conferences and/or seminars.

F.1.c. Consultation

In addition to direct supervision as stated in D.2.e., it is required that the resident receive training from at least two other Board-certified specialists. These specialists should be certified in disciplines such as dermatology, surgery, ophthalmology, anesthesiology, theriogenology, emergency medicine/critical care, clinical nutrition, or clinical pharmacology. Telephone or computer consultation is not considered adequate for training purposes.

F.1.d. Case Management

F.1.d.1. The resident will actively participate in patient management, including initial patient evaluation, diagnostic selection and interpretation, case management and decision-making, client communication, appropriate follow-up, and prompt professional communications with referring veterinarians. Case management should be directly supervised and reviewed by a Supervising Diplomate of the ACVIM.

F.1.d.2. A complete medical record must be maintained for each individual patient. The problem-oriented veterinary medical record system is strongly encouraged and records must be retrievable.

F.1.e. Study and Evaluation

F.1.e.1. Teaching Rounds: Residents must attend and participate in clinical rounds on a daily basis during the clinical training period. The resident should lead rounds discussions an average of once weekly.

F.1.e.2. Formal Conferences: Residents must attend formal conferences such as clinicopathologic conferences, journal clubs, or seminars in internal medicine and related disciplines weekly. Conferences given within a veterinary practice or hospital, or at a medical school or medical teaching hospital, are acceptable. The resident must give a formal presentation at such a conference at least once per year (a presentation at a regional, state or national meeting may substitute for this presentation).

F.1.e.3. Continuing Education Meetings: The resident must attend at least one major veterinary medical or human medical meeting during the residency.

F.1.f. Hospital Facilities and Specialized Diagnostic and Therapeutic Equipment

The following equipment is required to be available in the primary training hospital: standard radiographic, ultrasonographic, electrocardiographic, and endoscopic equipment. Clinical pathology capabilities including CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology, and endocrinology must be available in the primary training hospital or by arrangement with local or regional laboratories. Residents should receive instruction in ultrasonography, echocardiography, endoscopy, blood pressure measurement, and in electrodiagnostics

including ECGs, and EMGs. Access to an intensive care facility is necessary. Access to nuclear medicine and computed axial tomography is recommended but not required.

F.1.g. Library Facilities

The resident must have access to a veterinary or medical library with searching capabilities. This library should be available within reasonable commuting distance or be available by computer hookup. The library should have access to those journals listed by the Veterinary Medical Libraries section of the Medical Library Association.

F.1.h. Documentation and Verification of the Large Animal Internal Medicine Residency Program

F.1.h.1. Each residency-training program must register with the ACVIM office prior to accepting residents for training. Residency Training Program Registration Forms for are available from the ACVIM website. A specific Program Director (as defined in D.2.e.) must be designated for each residency-training program. There may not be more than one LAIM Program Director at a single institution. The Residency Training Program Registration Forms will require information about personnel, facility and equipment available for support of resident training, including names of Residency Advisors and Supervising Diplomates. The ACVIM Large Animal Internal Medicine Residency Training Committee will review all registration requests.

F.1.h.2. Each approved program must comply with all requirements as specified in Section D.2.c of the GIG (see above).

F.1.h.3. Each resident must register with the ACVIM office (see D.2.a and D.2.b.).

F.1.h.4. At the time of annual program renewal, Program Directors are required to verify resident activities, including satisfactory clinical training, interaction with consultants, documentation of training in radiology and clinical pathology, and documentation of study and education participation. Failure to provide the annual update will result in either probation or loss of the program's approved status.

F.1.h.5. Specialists with whom the resident has trained must provide the Program Director and/or Resident Advisor documentation of this interaction.

F.2. Application Procedure for Certification in Large Animal Internal Medicine

F.2.a. Applicant Instructions, Specialty Examination

Candidates may submit credentials following completion of twenty two (22) months of a residency, or the equivalent time in any other approved residency (provided they are in the final year of that program). If a candidate is previously ACVIM Board Certified and participating in an approved LAIM residency, he/she may submit his/her credentials within the final twelve (12) months of that program. A candidate intending to take the LAIM Examination must submit his/her credentials, including letters of reference, to arrive no later than July 1 of the year preceding the date on which they plan to take their examination. Each candidate will be notified no later than sixty (60) days after the submission deadline as to the acceptability of the submitted credentials. (see D.2.h). All candidates must submit the current standard application form of the specialty along with the other required documents as outlined in the Credentials/Case Report Requirements available on the ACVIM website (www.acvim.org). Applicants must carefully follow instructions provided in the credentials packet. Inadequate attention to

detail may cause the entire application to be rejected. The information listed here provides an overview of the requirements. More specific guidelines are in the credentials packet. Because application requirements are changed periodically, candidates must be certain that they are using the most current application and credentials packet. If there are any questions regarding the application process, the candidate should request clarification from the Chair of the Large Animal Internal Medicine Credentials Committee in writing. The following must be included in the application.

F.2.a.1. A candidate whose submitted credentials are accepted must submit a Candidate Fee Remittance form and a Specialty Examination fee by October 1 of the year preceding the year in which he/she plans to take the examination. Candidates whose credentials were accepted in a previous year and that have not taken the specialty examination must submit a Candidate Fee Remittance form and examination fee by October 1 of the year preceding the year in which they plan to take the examination. Fees may be made by US bank check (US funds) or by MasterCard or by Visa (refer to D.2.i). Late form submission and fees will not be accepted.

Although publication acceptance and approval of the case reports are not required prior to taking the Specialty Examination, the candidate **is strongly encouraged to meet these requirements for certification** prior to taking the examination. The candidate will NOT be eligible to receive board certification until each requirement is completed, even if they have successfully passed the Specialty Examination.

F.2.b. Instructions for Case Reports

The purpose of the case reports is to demonstrate the candidate's ability to use medical principles in the diagnosis and treatment of animal disease, and to communicate medical observations and data to his/her colleagues in a clear and organized manner. Specific directions for case reports regarding format and case selection are available from the ACVIM website or upon request from the ACVIM. **Case reports may be submitted starting the second year of the residency program. They may be submitted to the ACVIM office twice a year (October 1 and February 1). For second year residents, only one case report may be submitted at each time. For third year residents, up to two case reports may be submitted at each time.** The case report requirement is satisfied when the candidate accumulates two "passed" reports. Case reports once accepted will remain accepted.

Rejected case reports may be resubmitted after revision at any subsequent deadline. A revised case may only be resubmitted once. Alternatively, the candidate may choose to submit a new case report. A candidate who fails to meet the case report requirements will receive conditional acceptance of their credentials, allowing the candidate to take the specialty examination. However, the case report requirements must be fulfilled prior to certification.

F.2.c. Publications

F.2.c.1. One publication, relevant to the discipline of veterinary large animal internal medicine with the candidate as first author, is required of each candidate. The purpose of the publication requirement is to ensure that candidates demonstrate skill in written scientific medical communication, in particular that they display the ability to organize scientific data, communicate these data accurately in writing, and are capable of discussing the scientific findings in the context of the current medical literature.

F.2.c.2. The publication must be in a refereed scientific, medical or veterinary medical journal. A refereed journal is one that is governed by policies and procedures established and maintained by a standing editorial board which requires critical review of all papers and approval by at least one recognized authority on the subject. Book chapters and conference proceedings do not fit these criteria. Mainstream journals of major disciplines are acceptable providing they adhere to the principals of peer review, and the subject of the paper is relevant to large animal internal medicine. Clinical vignettes, short communications, brief communications, and serial features (i.e. ECG of the Month, Drug Topic of the Month) are not acceptable. Occasionally, a suitable manuscript submitted as a case report may be reclassified as a "brief communication" by a journal. The Large Animal Internal Medicine Credentials Sub committee on publication requirements (3 members of Credential committee, 1 of which is the chair) may accept such a manuscript. The candidate must get a ruling on the manuscript in advance of credentials submission. Any questions concerning the acceptability of a publication must be made in writing to the Chair of the Large Animal Internal Medicine Credentials Committee prior to the submission of the credentials packet.

F.2.c.3. An electronic copy (in Adobe® .pdf format) of one first author publication should be submitted with the rest of the credentials, if available. If the manuscript has been accepted but not yet published, an electronic copy of the letter of acceptance must be included or the publication will not be accepted. If a candidate is unsure whether a response from a journal is considered as "acceptance," they should petition the Large Animal Internal Medicine Credentials Committee Chair for clarification. A candidate who fails to meet the publication requirement will receive conditional acceptance of their credentials, allowing the candidate to take the specialty examination. **However, the publication requirement must be met prior to certification.**

F.2.c.4. A single or a series of case reports used as a publication for the application cannot be on the same cases as those submitted for the case reports.

F.2.c.5. Review articles are acceptable if published in an acceptable refereed journal.

F.2.d. Evaluation Procedure

F.2.d.1. The Large Animal Internal Medicine Credentials Committee will consist of several subcommittees. Different subcommittees will evaluate applications in equine practice and in food animal practice. There are typically three people on each subcommittee.

F.2.d.2. The candidate's case reports will be evaluated and rated by each reviewer as "passed" or "failed." The reviewer will record the evaluation on a standard form that will be retained by the ACVIM. The comments will be compiled by the Chair of the Large Animal Internal Medicine Credentials Committee and a summary sent to each unsuccessful candidate. The candidate may revise a "failed" case after giving careful consideration to reviewer's comments and resubmit that case report at a subsequent submission deadline. More specific guidelines on the grading of case reports are included in the credentials packet.

F.2.d.3. The Large Animal Internal Medicine Credentials Committee will notify the candidate of the acceptance or rejection of credentials within sixty (60) days of the deadline for submission of the credentials. **Copies of an appropriate published paper may be submitted by a candidate to the ACVIM office at any time after recognition that the candidate is enrolled in an ACVIM approved LAIM residency training program. However, case reports may only be submitted to the ACVIM office twice a year (October 1 and February 1), starting the second year of the residency program. The case report requirement is satisfied when the candidate accumulates two “passed” reports.** Conditional acceptance of credentials may be attained if the publication and/or case report requirements have not been met. With conditional acceptance, the candidate will be allowed to take the specialty examination. However, the candidate cannot achieve Diplomate status or be issued a certificate until the approved residency is completed and the publication and case report requirements have been fulfilled.

F.3. Specialty Examination Format

The specialty examination in large animal internal medicine is a three (3)-part examination held over two (2) days. The examination covers all aspects of veterinary internal medicine and consists of:

A three (3) part multiple-choice examination with questions related to large animal internal medicine. **The LAIM Specialty exam will be graded in sections. A candidate must pass each section in order to pass the examination. Once a candidate passes one or more sections of the examination, only the section(s) not passed need to be retaken on subsequent examination.**

More specific information on grading of the examination is provided in the instructions to candidates taking the examination, which is distributed at least sixty (60) days prior to the examination.

A blueprint for the examination will be posted on the ACVIM website at least sixty (60) days prior to the examination

G. SPECIALTY OF NEUROLOGY**Summary of Procedures for Candidate Certification
ACVIM, Specialty of Neurology****Registration**

Send to: ACVIM Office
When: Within ninety (90) days of beginning Residency Training Program
What: Registration Packet, Candidate Remittance Form and Registration Fee
Reviewed by: Neurology Residency Training Committee
Response time: Eight (8) weeks

General Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Resident Advisor progress letter, two multiple-choice questions, Candidate Fee Remittance Form and General Examination Fee
Reviewed by: ACVIM Office
Response time: Thirty (30) days

Credentials for Specialty Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Credentials packet, Candidate Fee Remittance Form and Credentials Fee
Reviewed by: Neurology Credentials Committee
Response time: Sixty (60) days

Registration and Fee for Taking the Specialty Examination

Send to: ACVIM Office
When: By February 1 of the year of the examination (for candidate re-taking the examination – see section D.2.j for your deadlines)
What: Candidate Fee Remittance Form and Specialty Examination Fee
Reviewed by: ACVIM Office and Neurology Credentials Committee
Response Time: Thirty (30) days

Appeals

Send to: ACVIM Office
When: Within thirty (30) days of notification of the candidate
What: Brief letter summarizing the basis for the appeal
Reviewed by: ACVIM Appeals Committee
Response by: ACVIM Professional Liaison
Response time: Within thirty (30) days of receipt of appeal

G.1. Guidelines for Neurology Residency Programs (In addition to the specialty specific guidelines listed below, all candidates must meet the general requirements of the ACVIM as spelled out in Sections D.1 and D.2 of the GIG above).

A listing of traditional (approved) neurology residency programs is available upon request from the ACVIM office.

G.1.a. Definition

G.1.a.1. A traditional neurology residency is a two (2) or three (3) year postgraduate training program, under the supervision of either an ACVIM Board-certified neurologist or a Diplomate of the European College of Veterinary Neurology (ECVN) (this individual will be the candidate's Resident Advisor as defined in section D.2.e above). The residency will be designed to educate the resident primarily in veterinary neurology and also in the related disciplines of internal medicine, neurosurgery, radiology, animal behavior, clinical pathology and the basic sciences (anatomy, pathology and physiology). Minimum requirements are ninety six (96) weeks of supervised clinical training, with at least seventy five (75) weeks in clinical neurology. All residency programs must be pre-approved by the Neurology Residency Training Committee.

G.1.a.2. It is possible to achieve certification in the Specialty of Neurology in a non-traditional residency-training program, but all of the training requirements of a traditional residency must be satisfied. The only allowable differences are that the training may occur at more than one facility, and the training may occur in non-contiguous blocks of time over an extended time period. If the ninety six (96) week clinical training program is not continuous, it must be arranged in blocks of time no less than two (2) weeks per block and a minimum total of twelve (12) weeks per year. Consequently, if the candidate completed the minimum of twelve (12) weeks training per year, a total of eight (8) years would be required to complete a program. Non-traditional residency training programs must be submitted in advance to the Neurology Residency Training Committee for approval. A candidate and his/her Resident Advisor will be responsible for documenting that the training has occurred as specified.

G.1.a.3 Each residency-training program (whether traditional or non-traditional) must register with the ACVIM office prior to accepting residents for training. Residency Training Program Registration Forms for are available from the ACVIM website. A specific Program Director (as defined in D.2.e.) must be designated for each residency-training program. There may not be more than one Neurology Program Director at a single institution. The Residency Training Program Registration Forms will require information about personnel, facility and equipment available for support of resident training, including names of Residency Advisors and Supervising Diplomates. All registration requests will be reviewed by the ACVIM Neurology Residency Training Committee.

G.1.a.4. Each approved program must comply with all requirements as specified in Section D.2.c of the GIG (see above).

G.1.b. Objectives for the Resident

- G.1.b.1. The resident must register with the ACVIM office within ninety (90) days of the beginning of the program (see D.2.a and D.2.b of the GIG).
- G.1.b.2. The resident shall develop comprehensive, state-of-the-art expertise and clinical proficiency in neurology and patient management, as well as experience in the disciplines outlined in G.1.a.1.
- G.1.b.3. Complete a review of the basic sciences of veterinary medicine as they pertain to neurology.
- G.1.b.4. Learn through experience in clinics, surgery, laboratories, departmental elective courses and professional conferences and seminars.
- G.1.b.5. Satisfy the residency training criteria toward qualification for Board certification by the ACVIM, Specialty of Neurology (see G.1.a.1.).

G.1.c. Description of the Program

- G.1.c.1. The residency will include intensive training in neurology and related disciplines under the guidance of either an ACVIM Diplomate Neurologist or an ECVN Diplomate who actively participates in the training program. Credentials for the specialty examination in neurology may be submitted at the completion of a two (2) year residency program, in the beginning of the third year of a three-year residency, or in the final year of an approved non-traditional residency program.
- G.1.c.2. A graduate degree program (M.S.) that includes a research component may be included in a three (3) year residency program. If a Ph.D. program is completed, at least a four (4) year program is anticipated.
- G.1.c.3. Objective of the Residency Program - The resident will receive sound academic and clinical training in neurology that will provide the basic educational requirements and capabilities for certification by the ACVIM, Specialty of Neurology.
- G.1.c.4. Residency Training - The resident shall receive intensive training under the in-house supervision of either an ACVIM Neurologist Diplomate or an ECVN Diplomate in all aspects of neurology and related disciplines.

Following a residency program in neurology, the candidate should:

- G.1.c.4.a. Have a broad understanding of internal medicine.
- G.1.c.4.b. Have a comprehensive knowledge of neuroanatomy, neurophysiology and neuropathology.
- G.1.c.4.c. Given a clinical case with a neurologic problem, be able to:
- Make an anatomic diagnosis.
 - Make a list of probable etiologic or pathologic diagnoses.

- List appropriate tests needed to confirm or refute each of the possible diagnoses.
- Perform and interpret ancillary diagnostic tests. Ancillary tests should include CSF, current electrodiagnostic procedures, and current imaging and radiographic modalities.
- Make a presumptive diagnosis based on the data accumulated.
- Offer a prognosis with and without appropriate treatment.
- Understand the principles and be able to prescribe the appropriate surgical and medical procedures for diseases affecting the nervous system. The ability to perform the surgical procedures is recommended but not required.
- Critically review the scientific literature. The method(s) by which this is accomplished should be documented in the residency program registration materials.

G.1.c.5. Caseload: The number of cases seen may vary depending on the species, kinds of problems, and depth of study. Emphasis should be on quality rather than quantity. Residents should have primary responsibility for their cases.

G.1.c.6. Consultation: Cases under the care of the resident should be reviewed regularly by a Diplomate of the Specialty of Neurology. Consultation with other qualified individuals should be encouraged, but not replace regular review with a Diplomate Neurologist. Opportunities for exposure to comparative medicine may best be integrated into the program through active contact with consultants. Utilization of existing programs at medical schools and medical teaching hospitals are desirable adjuncts to the training program.

G.1.c.7. Study and Education

G.1.c.7.a. Materials on suggested reading lists should be reviewed at the onset and during the residency program.

G.1.c.7.b. Attendance and participation in regularly scheduled seminars and case conferences is required.

G.1.c.7.c. It is desirable for residents to have a suitable period of their work time free from clinic duty in order to take courses, do library research, or pursue investigations of their own interest. Feedback and evaluation should come primarily from the Supervising Diplomate Neurologist during rounds, consultations and conferences.

G.1.c.7.d. In some instances, course work may become a part of the residency program but should augment rather than detract from clinical training.

G.1.c.8. Residents should have exposure to both large and small animal cases.

G.1.d. Advisor

G.1.d.1. At the onset of the residency program the institution’s Residency Program Director will assign each resident a Resident Advisor who is either an ACVIM Diplomate Neurologist or an ECVN Diplomate. .

G.1.d.2. The resident should meet with the Resident Advisor for formal reviews at the end of each six (6) months so his/her progress may be reviewed, critiqued and planned.

G.1.e. Evaluation

The progress of all residents should be reviewed by the Resident Advisor and Program Director and/or appropriate body as outlined in G.1.d. above.

G.1.f. Certificate

A Certificate of Residency Training should be presented upon successful completion of the final year of the program in compliance with the guidelines. Successful completion of the residency is a requirement for attaining Diplomate Status as a neurologist.

G.1.g. Clinical Service Rotations

G.1.g.1. The resident must be assigned to a clinical neurology service and supervised by the ACVIM or ECVN Diplomate Neurologist for no less than seventy five (75) weeks. The seventy five (75) weeks should include fifty (50) weeks of direct supervision (see G.1.g.3) and twenty five (25) weeks of indirect supervision (face to face contact between the Diplomate Neurologist Resident Advisor and resident at least four (4) days per week). Such experience may include electrodiagnostic services and neuropathology on clinical cases. Up to twenty five (25) weeks may be spent with primary responsibility for the clinical neurology service.

G.1.g.2. Other rotations may include research or clinical investigation, rotation on a neurology or neurosurgery service at a human hospital, rotations in internal medicine and other related specialties, preparation of manuscripts, out-rotations to other institutions, and participation in private practice supervised by an ACVIM Diplomate Neurologist or ECVN Diplomate.

G.1.g.3. Summary of minimum requirements:

| <u>Experience</u> | <u>Required Time</u> | <u>Reference in GIG</u> |
|----------------------|------------------------|-------------------------|
| Clinical Neurology | | |
| Direct supervision | Fifty (50) weeks | G.1.g.1 |
| Indirect supervision | Twenty five (25) weeks | G.1.g.1 |
| Radiology | Fifty (50) hours | G.1.g.4.e.ii |
| Clinical Pathology | Fifty (50) hours | G.1.g.4.e.iii |
| Neuropathology | Fifty (50) hours | G.1.g.4.e.iv |
| Neurosurgery | Fifty (50) hours | G.1.g.4.e.v |

Examples of appropriate scheduling:

| <u>Rotation</u> | Two (2)-Year Program <u>Weeks</u> | Three (3)-Year Program <u>Weeks</u> |
|---------------------|---|---|
| Clinical Neurology | 75 | 75 |
| Graduate Studies | ---- | 15-25 |
| Research | 10 | 10-25 |
| Radiology/Pathology | 5 | 5 |
| Internal Medicine | 10 | 10-20 |
| Customized | ---- | 20 |
| Vacation | <u>4</u> | <u>6</u> |
| Total | 104 | 156 |

G.1.g.4. The clinical rotations facilitate development of clinical proficiency, skills and knowledge of neurology through:

G.1.g.4.a. Exposure: Exposure to a wide variety of cases representing all facets of neurology and all levels of complexity.

G.1.g.4.b. Case Management: Case management with the guidance and collaboration of faculty/staff who are experienced specialists in their fields.

G.1.g.4.c. Discussion and Consultation: Ample opportunity for case discussions and consultations with faculty/staff.

G.1.g.4.d. Equipment: - Availability of modern equipment and facilities with which to develop technical expertise in diagnostic and therapeutic procedures.

G.1.g.4.e. Consultation: Patient care and specialty consultation.

G.1.g.4.e-i. Cases: The resident must have clinical patient-client contact for routine neurology cases as well as referral cases. A portion of the caseload must consist of emergency care of medical, surgical and trauma patients. The degree of responsibility the resident assumes will be appropriate to the nature of the neurology procedure and training experience. During the last year of training, the resident must be expected to make primary decisions for the care of most neurology patients. A complete medical record must be maintained for each individual case. A problem-oriented record system is encouraged. The records must be retrievable and include all ancillary reports.

G.1.g.4.e-ii. Radiology: The resident must spend at least fifty (50) hours during the residency with a Board-certified veterinary radiologist interpreting radiographs, attending seminars and participating in and evaluating the results of special radiographic procedures.

G.1.g.4.e-iii. Clinical Pathology: The resident must spend at least fifty (50) hours during the residency with either a Board-certified clinical pathologist or pathologist evaluating and interpreting clinical pathologic findings, attending

clinicopathological conferences and examining surgical sections.

G.1.g.4.e-iv. Neuropathology: The resident must spend at least fifty (50) hours during the residency in the review of veterinary neuropathology. This time may be spent in a lecture series, in seminars or in a formal training program.

G.1.g.4.e-v. Neurosurgery: The resident must spend at least fifty (50) hours participating in veterinary neurosurgical procedures.

G.1.g.5. Along with the faculty/staff service head, the resident on each clinical service will be responsible for receiving clinic appointments, supervising day-to-day patient care of animals admitted to the hospital, coordinating clinical teaching, and providing optimal client service and prompt, professional communications with referring veterinarians.

G.1.h. Emergency Duty

All residents should participate in the emergency service on a rotation basis.

G.1.i. Teaching Responsibilities (where applicable)

G.1.i.1. Clinical teaching (case supervision, daily ward rounds, etc.) of interns and/or senior and junior veterinary students assigned to the resident's service is encouraged.

G.1.i.2. Outpatient service: The resident will be responsible along with the faculty/staff service head for guiding and overseeing interns and/or senior and junior veterinary students in the operation of the specialty clinics.

G.1.i.3. Emergency service: The resident will supervise interns and/or senior and junior students in the operation of the hospital emergency service (on a rotating basis).

G.1.i.4. Assist in teaching the operative practice laboratories on a rotational basis.

G.1.i.5. Present selected lectures in the departmental courses for veterinary students.

G.1.i.6. Present cases at medicine grand rounds.

G.1.i.7. Present papers or seminars at the Residents' Conference.

G.1.i.8. Participate in departmental continuing educational programs.

G.1.j. Research

The resident must complete a significant research or clinical investigative project that meets approval of the resident advisor.

G.1.k. Annual Reports and Curriculum Vitae

G.1.k.1. All residents should initiate a record of their individual program at the beginning of their residency. This annual progress record will include the week-to-week schedule of the resident's activities and a summary of the schedule for the year that will be signed by the resident and the Resident Advisor. The original should be retained by the resident and updated every twelve (12) months. A copy should be sent/given to the Resident Advisor, program director and the Neurology Credentials Committee by the 1st of October following the end of each year of residency. This report should be in the format provided by the GIG and can be found on the ACVIM website.

G.1.k.2. An annual updated curriculum vita should be provided to the Resident Advisor and the Program Director.

G.1.k.3. The annual program records must be submitted with an updated CV as part of the resident's application packet for the certifying exam to the Neurology Credentials Committee by October 1 of the year prior to the resident's planned examination date.

G.1.l. Didactic Program (where applicable)

G.1.l.1. Residency Course Work: Appropriate didactic courses are desirable for all residents.

G.1.l.2. All residents must coordinate this program with their advisor.

G.1.l.3. Weekly Conferences

G.1.l.3.a. The following conferences are strongly suggested: Resident Rounds, Medical Conference (large and small animal), and Medicine Grand Rounds.

G.1.l.3.b. Residents should attend as many of the following conferences as can reasonably be scheduled around their operating schedule, case load and other course work: Small and Large Animal Surgical Conferences, Radiology Conferences, Pathology/Clinical Pathology Conferences, Journal Clubs, Ophthalmology Conferences.

G.1.l.3.c. Attendance at Neurology/Neurosurgical Conferences at human hospitals is optional, but encouraged.

G.1.m. Correspondence and Inquiries

All inquiries and requests for registration forms, lists of standard residencies and specialty credentials packets should be made to the ACVIM office or found on the ACVIM website.

G.2. Application Procedure for Certification in Neurology**G.2.a. Applicant Instructions**

Candidates may submit credentials following completion of a two (2) year residency, after twenty two (22) months of a three (3) year residency, or the equivalent time in any other approved residency (provided the candidate is in the final year of that program). If a candidate is previously ACVIM Board Certified in a specialty other than neurology

and participating in an approved Neurology residency, he/she may submit his/her credentials within the final twelve (12) months of that program. A candidate intending to take the Neurology Examination must submit his/her credentials, including letters of reference, to arrive no later than October 1 of the year preceding that examination. Each candidate will be notified no later than sixty (60) days after the submission deadline as to the acceptability of the submitted credentials. Specific details, instructions and application forms for meeting the credentials requirements and submitting a credentials application packet are available from the ACVIM website or upon request from the ACVIM office.

G.2.b. Requirements for Application

G.2.b.1. Candidates must have registered in an approved traditional or an approved non-traditional residency training program with the ACVIM office (see D.2.a. and D.2.b.) and trained under the supervision of either an ACVIM or an ECVN Diplomate Neurologist, prior to submission of a credentials application packet. (See D.2.h. for credentials application information.)

G.2.b.2. Candidates who are certified in the ACVIM Specialties of Large Animal Internal Medicine, Cardiology, Oncology, or Small Animal Internal Medicine, who wish to be certified in Neurology, must complete a minimum of a seventy five (75) week training program in neurology that has been approved by the Neurology Residency Training Committee under the supervision of either an ACVIM Diplomate or an ECVN Diplomate Neurologist.

G.2.b.3. Examination options (see D.2.f.).

G.2.c. Application Deadline

G.2.c.1. The deadline for submission of a complete credentials application packet for the neurology certifying process is October 1 of the year preceding that in which the candidate wishes to take the specialty examination.

G.2.c.2. The candidate should submit the application packet, with input/signature from his/her advisor, to the ACVIM office. Materials will be forwarded to the Neurology Credentials Committee Chair. Notification of acceptance/rejection of the credentials package will be made by the ACVIM office within sixty (60) days of the deadline for receiving credentials.

G.2.d. Candidate's Application Packets

The candidate must submit packets following the instructions provided to the candidates.

G.2.e. Reference Letters

Reference letters from three colleagues familiar with the candidate's training and/or work must be submitted to complete the candidate's application packet. The candidate will receive reference form letters that should be sent to referees for use in preparing their reference letters. One of the three referees selected must be the Neurology Diplomate, either ACVIM or ECVN, responsible for the major part of the candidate's training program.

The referees should send their original reference letter and four copies as directed in the credentials packet. Please note that it is the candidate's responsibility to verify that all reference letters reach the ACVIM office by the October 1 application deadline.

G.3. Specialty Examination Format

G.3.a. The Neurology Specialty Examination consists of five (5) parts:

- G.3.a.1. A comprehensive written examination;
- G.3.a.2. Neuroradiology;
- G.3.a.3. Neuropathology;
- G.3.a.4. Electrophysiology; and
- G.3.a.5. Clinical cases.

G.3.b. The comprehensive written section is predominantly composed of multiple-choice questions and covers all areas of neurology.

G.3.c. The remaining four parts require the examinee to interpret actual case materials presented in the form of 2 x 2 slides, photographs or kodachromes, specimens, radiographs, copies of electrodiagnostic results, or videographic recordings.

G.3.d. An examination rating process, performed by ACVIM Neurology Diplomates, will be used to establish the pass point for the comprehensive written section of the examination.

G.3.e. Each of the five (5) parts of the examination is graded separately and is autonomous from one another. To pass the Neurology Specialty Examination, the candidate must pass each of the five (5) parts of the examination; once a section is passed it need not be taken again.

A blueprint for the examination will be posted on the ACVIM website at least sixty (60) days prior to the examination

H. SPECIALTY OF ONCOLOGY**Summary of Procedures for Candidate Certification
ACVIM, Specialty of Oncology****Registration**

Send to: ACVIM Office
When: Within ninety (90) days of beginning Residency Training Program
What: Registration form; Registration fee, Candidate Fee Remittance Form and Registration Fee
Reviewed by: Oncology Residency Training Committee
Response time: Eight (8) weeks

General Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Resident Advisor progress letter, two multiple-choice questions, Candidate Fee Remittance form and General Examination Fee
Reviewed by: ACVIM Office
Response time: Thirty (30) days

Credentials for Specialty Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the specialty examination
What: Credentials packet, Candidate Fee Remittance Form and Credentials Fee
Reviewed by: Oncology Residency Training Committee
Response time: Sixty (60) days

Registration and Fee for Taking the Specialty Examination

Send to: ACVIM Office
When: By February 1 of the year of the examination (for candidate re-taking the examination – see section D.2.j for your deadlines)
What: Candidate Fee Remittance Form and Specialty Examination Fee
Reviewed by: ACVIM Office and Oncology Credentials Committee
Response Time: Thirty (30) days

Appeals

Send to: ACVIM Office
When: Within thirty (30) days of notification of the candidate
What: Brief letter summarizing the basis for the appeal
Reviewed by: ACVIM Appeals Committee
Response by: ACVIM Professional Liaison
Response time: Within thirty (30) days of receipt of appeal

H.1. Guidelines For Standard Oncology Residency Programs

(In addition to the specialty specific guidelines listed below, all candidates must meet the general requirements of the ACVIM as spelled out in Sections D.1 and D.2 of the GIG above). Each residency-training program (whether traditional or non-traditional) must register with the ACVIM office at least ninety (90) days prior to accepting residents for training. Residency Training Program Registration Forms for are available from the ACVIM website. A specific Program Director (as defined in D.2.e.) must be designated for each residency-training program. There may not be more than one Oncology Program Director at a single institution. The Residency Training Program Registration Forms will require information about personnel, facility and equipment available for support of resident training, including names of Resident Advisors and Supervising Diplomates. All registration requests will be reviewed by the ACVIM Oncology Residency Training Committee.

A listing of the current acceptable oncology residency training programs is available from the ACVIM website or upon request from the ACVIM office. Each residency-training program must be pre-approved by the Specialty of Oncology Residency Training Committee (RTC).

H.1.a. Description of the Program

A residency program in oncology will require a minimum of one hundred four (104) weeks of clinical training following at least one year of training (internship or equivalent) in general medicine and surgery. A minimum of seventy four (74) weeks must involve intensive training in clinical oncology. This seventy four (74) week period represents the minimum time that the candidate is supervised by an ACVIM-certified Diplomate(s) in the Specialty of Oncology. Because oncology is a multimodality discipline, the candidate must also have exposure to surgical and radiation oncology. The training program must include contact with specialists in other disciplines including surgery, pathology, clinical pathology, and radiotherapy. This contact may take the form of external rotations. The names of these individuals, areas of specialization, and details about the anticipated professional interaction should be included in the written program proposal to the Oncology Residency Training Committee.

It is essential that the candidate have face to face contact, in person (video conferencing is not acceptable as face to face contact) with the Supervising Diplomate(s) in the Specialty of Oncology. The minimum one hundred four (104) week intensive training in clinical oncology must be structured as follows:

H.1.a.1. Direct supervision (Section D.2.e.) for a minimum of fifty (50) weeks. Medical oncology direct supervision must be completed in two-week blocks, unless the candidate has extenuating circumstances and approval from the Oncology RTCC for specific exemptions. In such a case, approved one - week blocks would be acceptable. Examples of extenuating circumstances would be illness or family emergency.

H.1.a.2. Indirect supervision for an additional number of weeks to total seventy four (74) weeks under the supervision of an Oncologist. The Supervising Diplomate(s) is required to have face-to-face contact with the resident for at least one (1) hour per day for four (4) days per week where that work week is further defined as a minimum of four (4) ten-hour days or five (5) eight-hour days to account for the forty (40) hours per week. A work week of fewer than four (4) days will not count towards indirect supervision

H.1.a.3. Affiliated Rotations: In addition to the \geq seventy four (74) weeks noted in H.1.a.1. and H.1.a.2. above, a minimum of twenty four (24) weeks must be spent actively receiving patients in affiliated rotations. During that time, the resident must be under the direct supervision of the affiliated specialist and must participate in the affiliated specialty to the level at which they are capable. The required affiliate rotations are as follows:

- H.1.a.3.a Four (4) weeks of radiation oncology
- H.1.a.3.b One (1) week of clinical pathology (may be met through weekly/biweekly rounds)
- H.1.a.3.c One (1) week of surgical pathology (may be met through weekly/biweekly rounds)
- H.1.a.3.d Two (2) weeks of radiology (which may be met through weekly/biweekly rounds)
- H.1.a.3.e Four (4) weeks of internal medicine
- H.1.a.3.f Twelve (12) weeks of other rotations, with an ACVIM Diplomate in the Specialty of Oncology, or with Board-certified specialists in an allied specialty (e.g. ACVIM [Large Animal Internal Medicine, Small Animal Internal Medicine, Cardiology, Neurology]; ACVR [Radiation Oncology]; ACVS, ACVP, ACVR (Diagnostic Radiology), or ACVECC). With the exception of clinical pathology and surgical pathology, all of the affiliated rotations must be completed in two (2) week blocks, unless there are extenuating circumstances, as approved by the Oncology RTCC. In this case, specifically approved one (1) week blocks would be acceptable. Examples of extenuation circumstances would be illness or family emergency.

Individuals already Board-Certified in one of the required affiliated rotations are not required to complete additional directly supervised time in that specialty. For instance, a Diplomate of the Specialty of Small Animal Internal Medicine is not required to complete additional rotations in Internal Medicine. Instead, four (4) weeks of directly supervised time spent actively receiving patients in one or more of the other approved affiliated rotations would be substituted.

The candidate is required to obtain the written approval of the supervising diplomate for each off-site rotation included in the twenty four (24) weeks of affiliated rotations, and documentation of this approval must be forwarded to the RTCC.

H.1.a.4. Unsupervised time: In addition to the \geq ninety eight (98) weeks noted in Sections H.1.a.1, H.1.a.2, and H.1.a.3. above, six (6) weeks may be unsupervised. Attendance at continuing education meetings related to oncology is categorized as unsupervised time that may be considered part of the residency training.

H.1.a.5. Each approved program must comply with all requirements as specified in Section D.2.c of the GIG (see above).

H.1.a.6. Each resident must register with the ACVIM office (see D.2.a and D.2.b).

H.1.a.7. It is possible to achieve certification in the Specialty of Oncology in a non-traditional residency-training program, but all of the training requirements of a traditional residency must be satisfied. The only allowable differences are that the training may occur at more than one facility and the training may occur in non-contiguous blocks of time over an extended time

period, not to exceed five (5) years. If the one hundred four (104) week clinical training program is not continuous, it must be arranged in blocks of time no less than two (2) weeks per block and a minimum total of twenty (20) weeks per year. Non-traditional residency training programs must be submitted to the Oncology Residency Training Committee for approval at least ninety (90) days in advance of a candidate's residency start date. The candidate and his/her Supervising Diplomates will be responsible for documenting that the training has occurred as specified. If a residency occurs at multiple sites, all requirements for both direct and indirect supervision must be met, as well as requirements for rounds and conferences. Such programs will be required to provide lists of Diplomates and schedules of conferences in which the resident participates for each site.

H.1.a.8 Candidates who fail to complete a training program must notify the ACVIM Oncology Residency Training Committee of their termination date. Record will be made of the number of weeks completed and will remain on file for eight (8) years from the start date of the registered program. Candidates wishing to resume residency training must register with the ACVIM office, at which time the Oncology Residency Training Committee will review the new program and determine applicability of prior time to the current program.

H.1.a.9 An individual resident advisor may not train more than three oncology residents concurrently.

H.1.a.10 A Training Week (for Oncology this supersedes Section D.2.e of the GIG): For the purposes of the residency, a week's experience is defined as a minimum of forty (40) hours. A resident may not claim more than one training week in any seven (7) day calendar week. A directly or indirectly supervised work week is further defined as a minimum of four (4) ten-hour days or five (5) eight-hour days to account for the forty (40) hours per week.

In addition, a work week of two (2) or three (3) days will count as half a week of Direct Supervision as long as a total of twenty (20) or more hours were worked in those days. Individual (one day alone) days are not counted towards the total weeks of supervised residency, regardless of the number of hours worked. No more than four (4) weeks a year of supervised residency may be accumulated through half-weeks training. No time served per year above that four (4) weeks, which is served on a half-week basis, will be counted as supervised time.

The candidate must have routine access to adequate diagnostic facilities. These routine clinical facilities must include standard radiographic, ultrasonographic, electrocardiographic, and endoscopic equipment. Access to nuclear medicine, computerized axial tomography or MRI is strongly recommended, although it does not have to be on-site. The resident should have access to radiation therapy and a veterinary radiation oncologist who is Board-certified in Radiation Oncology. The oncology resident should have a minimum of four (4) weeks of direct contact with a veterinary radiation oncologist to discuss clinical management of patients receiving radiation therapy, radiation planning, dosimetry, and physics related to clinical radiation therapy.

A Board-certified veterinary clinical pathologist or pathologist and a fully equipped laboratory facility should be routinely available. In addition, there should be at least forty (40) hours of direct contact with a clinical pathologist or pathologist to facilitate training in diagnostic clinical cytology. A Board-certified pathologist should be routinely available for evaluation of clinical material. A minimum of forty (40) hours of direct contact exploring surgical histopathology is required during the residency.

The resident should have access to a veterinary library with on-line searching capacity and, at a minimum, access to all textbooks and full text access to all journals on the current examination committee reading list. This library should be available within a reasonable commuting distance (defined as within a fifteen (15) mile radius of the primary training site) or be available by computer hookup.

The resident will actively participate in the management of oncology patients, including receiving, diagnostics, management and decision making, client communication, appropriate follow-up and professional communication with the referring veterinarian. Case management should be supervised directly and be reviewed by the Supervising Diplomate. While on clinic duty, residents are required to participate in daily patient-oriented rounds.

In addition to directly supervised patient care and patient-oriented teaching rounds while on clinic duty, the candidate should participate in formal teaching conferences such as clinical pathology conferences, resident seminars, and grand rounds sessions, journal clubs, tumor biology classes, etc an average of four (4) times per month regardless of whether they are on or off clinic duty. The format and schedule of these conferences and presentations should be included in a written proposal to, and approved by, the Oncology Residency Training Committee.

The Resident Advisor must periodically evaluate the resident (a minimum of once every six (6) months) and should discuss the results of those evaluations with the candidate. Summaries of those evaluations will be provided to the Program Director who, if requested, will provide the Residency Training Committee with the written summaries of those evaluations. The Resident Advisor will complete and submit to the RTCC a standardized annual evaluation (available electronically from the ACVIM) for each resident. The purpose of this evaluation is to allow the RTCC, the Program Director, and the resident to identify and correct programmatic problems before they would place a program in jeopardy of suspension.

H.1.b. Academic Degree Programs

Academic degree programs (M.S. or Ph.D.) cannot be substituted for intensive clinical training.

H.1.c. Objectives

The residency program should provide intensive training in clinical oncology, including major responsibility for the care of animal patients with neoplastic disease. Lesser emphasis should be placed on training in internal medicine, including primary patient care and attendance at ward rounds or medical conferences in internal medicine. The resident should acquire a broad working knowledge of anatomy, physiology, and pathology of all body systems, and in-depth knowledge of the effects of cancer on the tumor-bearing host. It is expected that the candidate will acquire proficiency in clinical oncology by exposure to a sufficient number and variety of cases representing all facets of oncology in a hospital equipped for a specialty practice of oncology.

The resident should understand the fundamentals and applications of diagnostic methods including surgical pathology, cytology, radiology and other imaging methods, immunology and hematology. In addition, the resident should gain in-depth knowledge of treatment methods including surgery, chemotherapy, radiation therapy, hyperthermia, cryosurgery, immunotherapy, and be aware of important investigational methods of therapy (e.g. photodynamic therapy). Although clinical training will, in most cases, emphasize small companion animals, the resident should gain awareness and

understanding of the important neoplastic diseases in other domestic and common laboratory animals.

H.1.d Program Evaluation

Each approved Oncology residency program shall have a comprehensive review and re-approval performed by the Residency Training and Credentials Committee every three (3) years. The residency shall submit a detailed residency training program update form, which will be available via the ACVIM Oncology website. If a program does not maintain the minimum standards of the RTCC, it will be placed on probation and the program will be reviewed annually. While on probation, a residency program may not accept new residents into their program; however the time spent for current residents will still count towards their residency. If a program has not corrected their deficiencies after the second annual review, the program will be suspended.

In each of the two (2) years between comprehensive reviews, the RTCC will evaluate residency programs using a concise yearly update short form. This form will be available via the ACVIM's Oncology website.

H.1.e. Correspondence and Inquiries

Registration forms, lists of approved traditional residencies, and specialty credentials packets are available from the ACVIM website or by request from the ACVIM office. Candidate applications and credentials packages should be mailed directly to the ACVIM office. Residents are encouraged to contact the Residency Training Committee to assure that their program is in compliance with the ACVIM, Specialty of Oncology requirements.

H.1.f. Research

The resident is expected to participate in a laboratory or clinical investigative research project during the oncology residency.

H.1.g. Publications

The resident must have a minimum of one (1) major publication in the field of oncology in print or accepted for publication in a refereed scientific journal. A literature review or case report is not acceptable. (See H.2.b.)

H.2. Application Procedure for Certification in Oncology

H.2.a Candidate Instructions

H.2.a.1 Residents are required to submit an annual report of their progress for evaluation by the RTCC, consisting of a record of completed weeks with each requirement signed off on by the appropriate supervising diplomate. A standardized spreadsheet will be provided for this purpose by the RTCC. The candidate must ensure that their Resident Advisor submits their standardized evaluation of the resident (available from the RTCC via the ACVIM website) as part of their annual report.

H.2.b. Applicant Instructions

Candidates may submit credentials following completion of a two (2) year residency, after twenty two (22) months of a three (3) year residency, or the equivalent time in any other approved residency (provided the candidate is in the final year of that program) (see D.2.a, D.2.b, and D.2.h.2). If a candidate is previously ACVIM Board Certified and participating in an approved Oncology residency, he/she may submit his/her credentials within the final twelve (12) months of that program. A candidate intending to take the Oncology Examination must submit his/her credentials electronically, including letters of reference, to arrive no later than October 1 of the year preceding that examination. Each candidate will be notified no later than sixty (60) days after the submission deadline as to the acceptability of the submitted credentials. All candidates must submit the standard application form of the specialty along with the other required documents. If there are any questions regarding the application process, the candidate should request clarification in writing from the ACVIM office. The following must be included in the application:

- H.2.b.1. The completed application form.
- H.2.b.2. A copy of the publication, if available. (See H.2.b.)
- H.2.b.3. An updated curriculum vita.
- H.2.b.4. Letters documenting successful completion of any rotations outside of the institution where the residency is registered (if applicable). These letters must be signed by the person at the outside facility who was responsible for oversight of the rotation.
- H.2.b.5. Five (5) multiple-choice questions based on the last three (3) years of literature that are appropriate for addition to the oncology certifying exam question bank. Full references must be provided, and questions should be written following ABIM guidelines, which are available on the ACVIM website.
- H.2.b.6. Reference Forms or Letters: Applicants must have three (3) associates with whom they have worked in their training program submit a letter of reference. At least one (1) reference must be from an ACVIM Diplomate certified in the Specialty of Oncology. A letter may be used in lieu of the form. The reference forms or letters should be forwarded as directed in the credentials packet. It is the candidate's responsibility to ensure that the reference letters arrive before the October 1 deadline.
- H.2.b.7. Candidate Fee Remittance Form and Credentials fees, which may be paid by US bank check (US funds) or by MasterCard or Visa (refer to Section D.2.i.).

All of the above materials, including the publication (if available) should be sent to the ACVIM office so that it arrives no later than October 1 of the year preceding that in which the candidate wishes to take the specialty examination. Application packages that are either received late or are incomplete will not be reviewed by the Credentials Committee. COD packages will not be accepted.

H.2.c. Publications

H.2.c.1. All candidates must submit one (1) publication (electronic copy is preferred) on which they are first author.

H.2.c.2. The publication must be written in English (or a translation provided) and be in a refereed scientific, medical or veterinary medical journal. A refereed journal is one that is governed by policies and procedures established and maintained by a standing editorial Board which requires critical review of all papers and approval by at least one recognized authority on the subject. Book chapters or conference proceedings do not fit these criteria. Mainstream journals of major disciplines are acceptable providing they adhere to the principals of peer review, and the subject of the paper is in the field of veterinary oncology. Any questions concerning the acceptability of a publication should be directed to the Chair of the Oncology Residency Training Committee, prior to the submission of the credentials packet.

H.2.c.3. The publication must be in print or accepted for publication before the candidate will receive a Diplomate certificate. The examination may be taken, but the certification process is not complete until the publication requirement is completed.

H.2.c.4. Review articles and reports of a single case are not acceptable.

H.2.c.5. Published manuscripts that were used to meet the credentialing requirements of other ACVIM specialties cannot be used to meet the oncology requirements. However the candidate may use an otherwise acceptable manuscript that is based on work completed during programs other than their oncology residency, including, but not limited to internships, other non-ACVIM residencies, Master of Science programs and PhD programs.

H.2.d. Evaluation Procedure

H.2.d.1. The Oncology Residency Training Committee will consist of at least five members.

H.2.d.2. The candidate's credentials will be evaluated and rated by the reviewers as "acceptable" or "unacceptable." The reviewer will record his/her evaluation on a standard form that will be retained by the ACVIM. The comments will be compiled by the Chair of the Residency Training Committee and sent by the ACVIM office to each unsuccessful candidate.

H.2.d.3. The ACVIM Office will notify the candidate of the acceptance or rejection of his/her credentials within sixty (60) days of the deadline for submission of credentials.

H.3. Specialty Examination Format

The Oncology Specialty Examination is a two-part multiple choice examination given over a one (1) or two (2) day period. The examination will be configured in two (2) sections as follows:

- 1) Basic science
Multiple choice questions in this section will cover aspects of basic science relevant to oncology.

- 2) Clinical application and patient management.
Multiple choice questions in this section will cover aspects of applied science relevant to oncology. For some questions, case modalities will be used to present diagnostic and therapeutic problems; interpretation of clinical pathology, radiographs, CT and MRI images and cytologies will be required. Problem solving will be stressed.

The examination includes all aspects of oncology with special emphasis on medical oncology, but will include radiation oncology, surgical oncology and tumor biology. A current list of resources will be mailed to the candidates from the Chair of the Examination Committee.

A candidate must pass each section of the specialty examination. Failure of one (or both) section(s) of the examination will require retaking and passing the failed section(s).

The following procedures apply to candidates taking the previous four -part oncology specialty examination prior to conversion of the examination format to multiple choice only: Candidates failing only a single section of the previous, four -part examination (essay, short answer, practical or previous multiple choice) will automatically pass that section and therefore the entire examination, once that section is phased out. However, candidates failing more than one section of the previous examination cannot pass the entire examination by default. Candidates must demonstrate mastery of at least 75% of the material on the Specialty Examination, i.e. they must have passed three (3) of the four (4) sections of the previous examination. Candidates were permitted to retake previously failed sections of the earlier examination format for so long as they were offered; however if the candidate has not been successful in passing three (3) of the four (4) sections now that the new, entirely multiple-choice format is fully in place, they must take both sections of the new examination in order to attain Board Certification.

A blueprint for the examination will be posted on the ACVIM website at least sixty (60) days prior to the examination.

.

I. SPECIALTY OF SMALL ANIMAL INTERNAL MEDICINE**Summary of Procedures for Candidate Certification
ACVIM, Specialty of Small Animal Internal Medicine****Registration**

Send to: ACVIM Office
When: Within ninety (90) days of beginning Residency Training Program
What: Registration Packet, Candidate Fee Remittance Form and
 Registration Fee
Reviewed by: Small Animal Internal Medicine Residency Training Committee
Response time: Eight (8) weeks

General Examination

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Resident Advisor progress letter, two multiple-choice questions,
 Candidate Fee Remittance Form and General Examination Fee
Reviewed by: ACVIM Office
Response time: Thirty (30) days

Credentials for Specialty Examination (See special deadlines for case reports below)

Send to: ACVIM Office
When: By October 1 of the year preceding the examination
What: Credentials Packet, Candidate Fee Remittance Form and
 Credentials Fee
Reviewed by: Small Animal Internal Medicine Credentials Committee
Response time: Sixty (60) days

Registration and Fee for Taking the Specialty Examination

Send to: ACVIM Office
When: By February 1 of the year of the examination (for candidate re-
 taking the examination – see section D.2.j for your deadlines)
What: Candidate Fee Remittance Form and Specialty Examination Fee
Reviewed by: ACVIM Office and Small Animal Internal Medicine Credentials
 Committee
Response Time: Thirty (30) days

Appeals

Send to: ACVIM Office
When: Within thirty (30) days of notification to the candidate
What: Brief letter summarizing the basis for the appeal
Reviewed by: ACVIM Appeals Committee
Response by: ACVIM Professional Liaison
Response time: Within thirty (30) days of receipt of appeal

Certification in Small Animal Internal Medicine requires meeting each of the criteria listed below:

- 1) The candidate successfully completes an approved residency training program in Small Animal Internal Medicine (SAIM)**
- 2) The candidate attains a passing score on the general examination of the ACVIM**
- 3) The SAIM Credentials Committee accepts the credentials submitted by the candidate as meeting the requirements to take the Specialty Examination**
- 4) The candidate attains a passing score on the SAIM Specialty Examination**

The candidate completes the publication requirements for the SAIM specialty as specified in the current General Information Guide

Further information regarding these requirements is provide in the following sections

I.1. Minimum Requirements for Residency Training Programs in the Specialty of Small Animal Internal Medicine

(In addition to the specialty specific guidelines listed below, all candidates must meet the general requirements of the ACVIM as spelled out in Sections D.1 and D.2 of the GIG above).

I.1.a. General Description

I.1.a.1. An acceptable small animal internal medicine residency is a minimum one hundred fifty six (156) week intensive postgraduate clinical training program under the supervision of at least two (2) ACVIM Diplomates (both of whom must be SAIM), or at least one (1) ACVIM Diplomate (SAIM) and at least one (1) Diplomate of the European College of Veterinary Internal Medicine (Companion Animal.)

I.1.a.2. Residency training in Small Animal Internal Medicine requires the on-site presence of at least two (2) ACVIM (SAIM) Diplomates or at least one (1) ACVIM (SAIM) and at least one (1) Diplomate of the European College of Veterinary Internal Medicine (Companion Animal). On-site is defined as listed in Section D.2.e of the GIG. The small animal internal medicine residency must take place at a specialty clinical facility where the resident will provide primary patient care appropriate to his/her level of training and manage cases in all facets of veterinary internal medicine, utilizing clinical pathology, pathology, radiology, ultrasonography, and endoscopy.

I.1.a.3. If adequate personnel or facilities to fulfill these requirements are not available on site, the resident must make special arrangements at other facilities to fulfill all deficiencies. The Small Animal Internal Medicine Residency Training Committee (RTC) must approve such arrangements in advance. Letters of commitment for the provision of off-site training must be submitted when requesting approval of a new program and updated letters of commitment must be submitted at the time of annual renewal of an existing program.

I.1.a.4. Certification in the Specialty of Small Animal Internal Medicine may be achieved by successfully completing any residency-training program that has attained approval by the SAIM Residency Training Committee as meeting all training requirements prior to the start of training. These programs may be regularly established (traditional) residencies or ad-hoc (non-traditional) residencies. The only allowable differences are that in non-traditional programs the training may occur at more than one facility and the training may occur in non-contiguous blocks of time over an extended time period (see I.1.b.2-

I.1.b.5). All residency-training programs (whether “Traditional” or Non-traditional) must be approved prior to the start of training by the RTC. A candidate and his/her Resident Advisor will be responsible for documenting that the training has occurred as specified. For programs in which the training occurs at more than one facility or in non-contiguous blocks of time (see I.1.b.2-I.1.b.5), the Program Director and Resident Advisor will be asked to provide annual documentation of a candidate’s schedule of training. All candidates and their Resident Advisors are responsible for documenting that training has occurred as specified, and should submit this documentation to the RTC as part of the Annual Report due each August 15.

I.1.b. Direct Supervision During the one hundred fifty six (156) week Clinical Training Program

I.1.b.1. Refer to D.2.e for definitions relating to residency training.

I.1.b.2. Of the one hundred fifty six (156) week clinical program:

I.1.b.2.a. A minimum of sixty eight (68) weeks must consist of intensive clinical training in the Specialty of Small Animal Internal Medicine with the trainee being under direct supervision of at least two (2) ACVIM Diplomate(s) in the Specialty of Small Animal Internal Medicine or at least one (1) ACVIM (SAIM) Diplomate and at least one (1) Diplomate of the European College of Veterinary Internal Medicine (Companion Animal).

I.1.b.2.b. A minimum of sixteen (16) additional weeks must consist of clinical training under the direct supervision of one (1) or more Supervising Diplomates in the Specialty of Small Animal Internal Medicine (other than those referred to in I.1.b.2.a.), Cardiology, Neurology or Oncology, and/or one (1) or more Supervising Diplomates of the European College of Veterinary Internal Medicine – Companion Animal in the Specialty of Internal Medicine or Cardiology, or the European College of Veterinary Neurology. This training can be done:

b-i) As defined blocks of time, such as formal rotations on a specialty service; or

b-ii) On an individual case basis. For example, a resident on a small animal medicine service and supervised by an internist could receive supervision from a Cardiologist regarding management of specific cases. Such supervision by the Cardiologist would partially fulfill this requirement. The determinations of equivalency between case quantity and time spent is the responsibility of the Resident Advisor. After review of the annual report, if questions of equivalency are raised, the RTC may require that the Program Director provide an explanation of how the determination of equivalency was reached.

I.1.b.2.c. The remaining seventy two (72) weeks should consist predominantly of clinical training in small animal internal medicine or in related areas, not necessarily under direct supervision of an ACVIM Diplomate. These may include assigned rotations in related clinical fields such as oncology, neurology, cardiology, emergency medicine and critical care, anesthesiology, pathology, surgery, dermatology,

ophthalmology, clinical nutrition, and clinical pharmacology. These weeks also may include non-clinical responsibilities such as research, writing, studying, teaching or obtaining experience with a radiologist or clinical pathologist. No more than sixteen (16) weeks may be spent on any one of the aforementioned rotations during the residency program. However, there is no maximum number of weeks that may be spent on internal medicine or research, provided that the resident has met the requirements of sections I.1.b.2.a and I.1.b.2.b. Vacation time and time for attendance at meetings should be taken during this seventy two (72) week period, not during the sixty eight (68) or sixteen (16) week period defined under I.1.b.2.a. or I.1.b.2.b.

I.1.b.3. If the one hundred fifty six (156) week clinical training program is not continuous, it must be arranged in blocks of time no less than two (2) weeks per block and a minimum total of twelve (12) weeks per year. In addition, the entire residency training program must be completed within a maximum period of eight (8) years.

I.1.b.4. The resident must spend the equivalent of at least eighty (80) hours direct contact during the residency with a Board-certified veterinary radiologist. At least forty (40) hours should be spent interpreting radiographs, learning and evaluating the results of special imaging techniques (other than ultrasonography), and attending radiology rounds and/or seminars. An additional minimum of forty (40) hours of training in ultrasonography must be provided under the supervision of a Board-certified radiologist. This training should emphasize abdominal ultrasonography and must include hands-on performance of abdominal ultrasonography, observation of ultrasound procedures on the resident's own patients, and theoretical training in the principals and application of ultrasonography. This is the minimum requirement for training in ultrasonography and true proficiency in this technique will require more than this minimum standard.

I.1.b.5. The resident must spend the equivalent of at least forty (40) hours direct contact during the residency with a Board-certified veterinary clinical pathologist or pathologist evaluating clinical pathologic findings, reviewing cytologies and biopsies, and attending clinical pathologic conferences and/or seminars.

I.1.c. Consultation

In addition to direct supervision as stated in D.2.e., it is required that the resident receive training from at least two (2) other Board-certified specialists. These specialists should be certified in disciplines such as dermatology, surgery, ophthalmology, anesthesiology, theriogenology, emergency medicine/critical care, clinical nutrition, or clinical pharmacology. Telephone or computer consultation is not considered adequate for training purposes.

I.1.d. Case Management

I.1.d.1. The resident will actively participate in the management of patients seen, including receiving; selection, performance and interpretation of diagnostic tests; patient management and decision-making; client communication; appropriate follow-up; and prompt professional communications with referring veterinarians. Case management should be directly supervised and reviewed by a Supervising Diplomate of the ACVIM.

I.1.d.2. A complete medical record must be maintained for each individual patient. The problem-oriented veterinary medical record system is strongly encouraged and records must be retrievable.

I.1.e. Study and Evaluation

I.1.e.1. Teaching Rounds: Residents must attend and participate in clinical rounds on a daily basis during the clinical training period. The resident should lead rounds discussions an average of once weekly.

I.1.e.2. Formal Conferences: Residents must attend formal conferences such as clinicopathologic conferences, journal clubs, or seminars in internal medicine and related disciplines weekly. Conferences given within a veterinary practice or hospital, or at a medical school or medical teaching hospital, are acceptable. The resident must give a formal presentation at such a conference at least once per year (a presentation at a regional, state or national meeting may substitute for this presentation).

I.1.e.3. Continuing Education Meetings: - The resident must attend at least one major veterinary medical or human medical meeting during the residency.

I.1.f. Hospital Facilities and Specialized Diagnostic and Therapeutic Equipment

The following equipment is required to be available in the primary training hospital: standard radiographic, ultrasonographic, electrocardiographic, and endoscopic equipment. Clinical pathology capabilities including CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology, and endocrinology must be available in the primary training hospital or by arrangement with local or regional laboratories. Residents should receive instruction in ultrasonography, echocardiography, endoscopy, blood pressure measurement, and in electrodiagnostics including ECGs, EEGs, and EMGs. Access to an intensive care facility is necessary. Access to nuclear medicine, computed axial tomography and magnetic resonance imaging is recommended but not required.

I.1.g. Library Facilities

The resident must have access to a veterinary or medical library with searching capabilities. This library should be available within reasonable commuting distance or be available by computer hookup. The library should have access to those journals listed by the Veterinary Medical Libraries section of the Medical Library Association.

I.1.h. Documentation and Verification of the Small Animal Internal Medicine Residency Program

I.1.h.1. Each residency-training program must be approved by the RTC prior to accepting residents for training. To do this, the Program Director must submit a completed Residency Training Program Registration Form (RTPRF) to the ACVIM office for review by the committee. Residency Training Program Registration Forms are available from the ACVIM office or website. A specific Program Director (as defined in D.2.e. above) must be designated for each residency-training program. There may not be more than one SAIM Program Director at a single institution. Registration forms require that information about personnel, facility and equipment available for support of resident training, including names of Residency Advisors and Supervising Diplomates is provided. If off-site training is to occur during the residency, letters of commitment from the provider(s) of this training must be submitted at the same time as the RTPRF for each new program request. All registration requests will be reviewed by the RTC. The RTC will either approve the program or provide details of those deficiencies that must be corrected in order for the program to be approved. A program that does not provide the required information or one which does not fulfill all requirements will not be approved by the RTC. If a Program Director leaves a program, it is the institution's responsibility to notify the SAIM Residency Training Committee of the proposed change in directors prior to the change actually occurring. Failure to do so will result in a program being placed on probation during the programs review by the Committee and failure to respond to RTC requests will result in program suspension (termination). Time served by residents in an unapproved, probationary, or suspended program will not count toward the completion of a residency in SAIM.

I.1.h.2. Each approved program must comply with all requirements as specified in Section D.2.c of the GIG (see above).

I.1.h.3. Each resident must register with the ACVIM office (see D.2.a and D.2.b).

I.1.h.4. At the time of annual program re-approval, Program Directors and Resident Advisors may be asked to verify resident activities, including (but not limited to) satisfactory clinical training, interaction with consultants, documentation of training in radiology and clinical pathology, and documentation of study and education participation. Letters of commitment for required blocks of off-site training must be submitted annually at the time of program re-approval.

I.1.h.5. Specialists with whom the resident has trained must provide the Program Director and/or Resident Advisor documentation of this interaction.

I.1.h.6. The RTC can, at any time, request further information or documentation from the Program Director, Resident Advisor or any Supervising Diplomate if such information is deemed necessary to verify that residency training is occurring as described in the Program Description Form.

I.2. Application Procedure for Certification in Small Animal Internal Medicine

I.2.a. Applicant Instructions, Specialty Examination

Candidates may submit credentials following completion of a two (2) year residency, after twenty two (22) months of a three (3) year residency, or the equivalent time in any other approved residency (provided the candidate is in the final year of that program). If a candidate is previously ACVIM Board Certified and participating in an approved SAIM residency, he/she may submit his/her credentials within the final twelve (12) months of that program. A candidate intending to take the SAIM Examination must submit his/her credentials, including letters of reference, to arrive no later than October 1 of the year preceding that examination. Each candidate will be notified no later than sixty (60) days after the submission deadline as to the acceptability of the submitted credentials. All candidates must submit the current standard application form of the specialty along with the other required documents. Applicants must carefully follow instructions provided in the credentials packet. Inadequate attention to detail may cause the entire application to be rejected. The information listed here provides an overview of the requirements. More specific guidelines are in the credentials packet. Because application requirements are changed periodically, candidates must be certain that they are using the most current application and credentials packet. If there are any questions regarding the application process, the candidate should request clarification from the Chair of the Small Animal Internal Medicine Credentials Committee in writing.

Although publication acceptance is not required prior to the Specialty Examination, the candidate is strongly encouraged to meet this requirement for certification prior to taking the examination. The candidate will NOT be eligible to receive board certification until each requirement is completed, even if the Specialty Examination has been passed successfully. The following must be included in the application.

I.2.a.1. Two (2) copies of the completed credentials application form

I.2.a.2 Two (2) copies of the letter of understanding:

I.2.a.3 Two (2) copies of three (3) completed reference forms; the candidate must have three (3) associates with whom he/she has worked as an internist provide these. The referees must include at least two (2) ACVIM (SAIM) Diplomates or at least one (1) ACVIM (SAIM) Diplomate and at least one (1) Diplomate of the European College of Veterinary Internal Medicine (Companion Animal). These diplomates must have worked with the candidate for a minimum of six (6) months before becoming a referee. Each referee should forward the reference form as directed in the credentials packet.

Each referee should forward the reference form as directed in the credentials packet.

I.2.a.4. Two (2) copies of the publication, if available (See I.2.c.).

I.2.a.5. Candidate Fee Remittance Form and Credentials fees may be made by US bank check (US funds) or by MasterCard or by Visa (refer to D.2.i).

Send all the above material to the ACVIM office so that it arrives no later than October 1 of the year preceding that in which the candidate wishes to take the specialty examination. The Small Animal Internal Medicine Credentials Committee will not review late or incomplete application packages. COD packages will not be accepted. It is the

candidate's responsibility to see that these arrive no later than the October 1 deadline. Candidates should arrange for confirmation of delivery through certified mail return receipt or through tracked overnight mail services.

I.2.b. Additional Requirements for Certification - Publication

- I.2.b.1. One (1) publication, relevant to the discipline of veterinary small animal internal medicine with the candidate as first author, is required of each candidate.
- I.2.b.2. The publication must be written in English (or a translation provided) and be in a refereed scientific, medical or veterinary medical journal. A refereed journal is one that is governed by policies and procedures established and maintained by a standing editorial board which requires critical review of all papers and approval by at least one recognized authority on the subject. Book chapters and conference proceedings do not fit these criteria. Mainstream journals of major disciplines are acceptable providing they adhere to the principals of peer review, and the subject of the paper is relevant to small animal internal medicine. Clinical vignettes, short communications, brief communications, and serial features (i.e. ECG of the Month, Drug Topic of the Month) are not acceptable. Occasionally, a suitable manuscript submitted as a case report may be reclassified as a "brief communication" by a journal. The Small Animal Internal Medicine Credentials Committee Chair may accept such a manuscript if this occurs. The candidate must get a ruling on the manuscript in advance of credentials submission. Any questions concerning the acceptability of a publication should be made in writing to the Chair of the Small Animal Internal Medicine Credentials Committee prior to the submission of the credentials packet.
- I.2.b.4. Review articles are acceptable if published in an acceptable refereed journal.
- I.2.b.5. Copies of an appropriate published paper or an appropriate manuscript accompanied by copies of the final acceptance letter from the journal editor may be submitted by a candidate to the ACVIM office at any time after the candidate successfully registers their enrollment in an approved ACVIM Small Animal Internal Medicine residency training program. The publication requirement must be met by a candidate prior to their being awarded board certification.

I.3. Specialty Examination Format

The specialty examination in small animal internal medicine consists of three (3) sections, one (1) of which contains two (2) parts that are graded together as a single section. The other two (2) sections are independently graded. The examination is held over two (2) days. The examination covers all aspects of veterinary internal medicine and comprises:

Section One – (Medical Literature) consists of multiple-choice questions on current literature pertaining to the practice of small animal internal medicine;

Section Two – (Essay) consists of essay questions related to small animal internal medicine;

Section Three – Case Materials

Part A –consists of case-based multiple-choice questions designed to test both knowledge and problem-solving skills related to small animal internal medicine.

Part B - This part covers patient management related to the practice of small animal internal medicine. The patient management section is designed to test the candidate's clinical judgment, diagnostic acumen, and therapeutic decision-making skills in a multiple-choice format. Radiographs, photographs, ECGs, echocardiograms, etc. may be incorporated into the questions.

A candidate must pass each section of the Small Animal Specialty Examination in order to become certified. Candidates that do not pass all sections on the first attempt need only retake the failed sections. Once a section is passed, it remains passed. In this examination format, the scores of Parts 3 – A and 3-B will be combined to form a single grade for Section 3. If a candidate fails Section 3, they must retake both parts during a subsequent examination, as scores from different parts of the same section of examinations offered in different years may not be combined to create a passing total score.

More specific information on grading of the examination is provided in the instructions to candidates taking the examination, which is distributed a minimum of sixty (60) days prior to the examination.

A blueprint for the examination will be posted on the ACVIM website at least sixty (60) days prior to the examination