



AMERICAN COLLEGE OF VETERINARY INTERNAL MEDICINE (ACVIM)

General Information Guide (GIG)

Effective July 1, 2001 – June 30, 2002

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The information contained in this Guide was submitted for publication on July 1, 2000. It represents the current procedures and guidelines 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 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 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 80215-3327 USA
Phone: (800) 245-9081 (in USA and Canada)
(303) 231-9933
Fax: (303) 231-0880
Website: www.ACVIM.org
E-mail: ACVIM@ACVIM.org

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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.

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 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 credential 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 internal medicine, cardiology, neurology, and oncology through the 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

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

Integrity

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

Service

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.

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

A.1.c. Responsibilities of ACVIM Leadership

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

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

A.2. INTRODUCTION TO THE COLLEGE

The American College of Veterinary Internal Medicine (ACVIM) is the American Veterinary Medical Association-sanctioned governing and certifying organization for specialists in veterinary internal medicine, cardiology, neurology, and oncology. The ACVIM was founded in 1972 with 58 charter Diplomates. The College currently has 914 Diplomates.

A.3. HISTORY OF THE COLLEGE

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

B. ORGANIZATIONAL STRUCTURE OF THE COLLEGE

Based on the Constitution and Bylaws of the ACVIM, the management and control of the professional and business affairs of the College are vested in the Board of Regents. All voting Board members are elected and consist of the Chair of the Board of Regents, President of the College, President-Elect, Vice-President, and the Presidents of the Specialties of Cardiology, Internal Medicine, Neurology, and Oncology. In addition to these officers, two At-Large Board members are elected to serve three-year terms. An ACVIM Professional Liaison and an Executive Director are hired by the Board to manage the day-to-day operations of the College and are non-voting members of the Board.

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

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

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

The information included in this brochure is a summary of the policies and procedures that govern the College. Specific information not covered in the brochure is available from the ACVIM office:

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Website: www.ACVIM.org
E-mail: ACVIM@ACVIM.org

C. ACVIM MEMBERSHIP CATEGORIES

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

Charter Diplomates

The Board of Regents invited recognized leaders in veterinary internal medicine to become Charter Diplomates when the College was founded. Charter Diplomates may be considered when new specialties are formed.

Active Diplomates

Active Diplomates are approved by the Board of Regents after having fulfilled the prescribed credentials requirements and passed the general and certifying examinations.

Inactive Diplomates

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. Inactive members lose the following benefits: the right to vote, hold office, and attend business meetings of the College; the subscription to the *Journal of Veterinary Internal Medicine* and receipt of the College newsletter; member discount on Forum registration; listing as an ACVIM Diplomate in the ACVIM Directory and the AVMA Directory; and other privileges deemed appropriate by the Board.

Honorary Diplomates

The Board may confer Honorary Diplomate status on persons who have contributed materially to veterinary internal medicine. The intent of this recognition is for those nearing retirement or who are retired. Honorary Diplomates shall have all the rights and privileges of members except the right to vote, hold office or attend regular business meetings of the College.

Retired or Disabled Diplomates

A Diplomate can request a retired or disabled status within the College by petitioning the Board of Regents. A retired member is "one who has ceased all regular employment and whose annual earnings do not exceed the maximum earning limit established by the U.S. government to remain qualified for social security retirement benefits" and a disabled member 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 "retired" or "disabled" ACVIM diplomate is subject to the following "limited membership privileges":

1. no longer required to pay dues;
2. will continue to receive newsletter;
3. may not vote or hold an ACVIM office;
4. must pay registration fees for College-sponsored functions, except when the Board of Regents specifically provides a retired or disabled Diplomate fee for a College function. (ACVIM Constitution, Article V, Section 9)

D. GENERAL INFORMATION

D.1. Admission Process

D.1.a. Admission Requirements

Diplomates must fulfill the following general requirements:

- D.1.a.1 Be a graduate of a veterinary school or college.
- D.1.a.2 Have a satisfactory moral and ethical standing.
- D.1.a.3 Complete a one year rotating internship or equivalent.
- D.1.a.4 Satisfactorily complete an 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 certifying 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, internal medicine, neurology, or oncology should register with the ACVIM office within 90 days of beginning their program (eg. by October 1 for residencies beginning July 1) and pay a 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 may jeopardize the candidate's certification process.** The rules and regulations in effect at the time the candidate registers will generally apply for the duration of the certification process.

D.2.b. Procedure

- D.2.b.1 A candidate should obtain a registration form from the ACVIM website.
- D.2.b.2 Within 90 days of beginning a program, the candidate should complete the registration form and send it to the ACVIM office with the appropriate registration fee.
- D.2.b.3 The candidate will receive a letter confirming receipt of the registration within 8 weeks. All residency programs should be approved prior to the resident starting the program.
- 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 Residency Training Committee will then rule on the acceptability of the candidate's credentials and training.

D.2.b.5. Should a candidate wish to become certified in more than one specialty, the candidate must indicate multiple registrations at the time forms are submitted and must satisfy the requirements of each specialty. A separate registration fee is required for each specialty.

D.2.b.6. A candidate in an alternative training program (one not approved as a "standard" program) must be sure their program is approved prior to starting the residency. The Program Director should submit a program registration form to the Specialty Residency Training Committee for review and written approval of the program at least six weeks prior to the beginning of the training period. Guidelines for an acceptable program and application forms are available on the ACVIM website. The application form must include a statement from the Supervising Diplomate confirming his/her participation in the program and specifying obligations of the Diplomate to the candidate.

Failure to have a program approved in advance may jeopardize the certification process.

D.2.c. Specialty Residency Training

Each specialty has a Residency Training Committee that specifies training criteria that must be met for certification. This committee will review training programs submitted by institutions (Residency Training Registration Form, see D.2.c.1 below) and residents, and rule on their acceptability.

Registration materials for programs in D.2.c.1 can be obtained from the ACVIM website and submitted for approval prior to any residents starting the training program. Update materials in D.2.c.2 will be sent to the Program Director from the ACVIM office by July 1 and should be returned by the institutions by August 15. Returned forms will be forwarded to the Specialty Residency Training Committee for their review/approval.

D.2.c.1. Registration materials (Residency Training Registration Form) specific for each specialty are to be completed prior to any residents starting the training program.

D.2.c.2. Annually the Program Director for each institution will be responsible for updating the Program Registration Form by August 15.

D.2.d. Definitions Relating to Residency Training

Program Director - the ACVIM Diplomate responsible for overseeing all ACVIM residency training programs at a given site. The ACVIM office will direct all correspondence concerning the programs at that site to this individual. The Program Director is responsible for disseminating information to the appropriate individuals. There may be separate Program Directors for large and small animal programs. In the Specialty of Cardiology, the residency training program will be directed by the Resident Advisor if the institution's Program Director is not a Board-certified Cardiologist.

Resident Advisor - the ACVIM Diplomate responsible for that resident's program. This Diplomate will sign all documentation verifying completion of program requirements. This Diplomate must be certified in the specialty and species in which the resident is pursuing certification.

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.

Supervising Diplomate - any ACVIM Diplomate responsible for direct supervision of a resident while that resident is in clinical training.

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

D.2.e. Examination Options

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.e.1. A candidate wishing to take the specialty examination must first satisfy the credentials requirements of that specialty.

D.2.e.2. A candidate must take the general examination before or during the same week as the specialty examination.

D.2.e.3. A candidate electing to take the general and specialty examinations at the same time must have completed at least two full years of an approved residency training program or its equivalent.

D.2.f. General Examination

The general examination is prepared by a College committee appointed by the Board of Regents. Members of the committee will be selected from all specialties within the College. 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 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. A candidate who fails to pass the examination may apply to the ACVIM office to retake the examination under the provisions of D.2.i. A person who has previously registered his/her training program with the College and has had it approved by the appropriate Specialty Residency Training Committee may take the general examination if the following are fulfilled:

D.2.f.1. A candidate must complete at least 18 months of an approved residency program, or its equivalent before taking the general examination. Applications are due in the ACVIM office no later than October 1 of the year immediately prior to the year of the examination.

D.2.f.2. In order to take the general examination, the following items must be submitted: (a) a letter from the Supervising Diplomate verifying satisfactory progress in the training program; (b) a non-refundable examination fee payable to the ACVIM; and (c) two original multiple choice questions will be 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 examination fee and Supervising Diplomate letter prior to October 1 of the year preceding the exam. 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 question must include a single best answer and four distracters. "All of the above," "None of the above," "More than one of the above" or a similar variation are not acceptable choices. 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 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 the General Examination that year.

D.2.f.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.3. are met.

D.2.f.4. The general examination will be given at the site of the annual ACVIM Forum.

D.2.g. Specialty Examinations

D.2.g.1. Each specialty has established credentials requirements that must be satisfied before the candidate may take the specialty examination. The specialty certifying examinations will be developed, administered and graded by the appropriate Specialty Examination Committee and rated by Diplomates within each specialty. Applicants should request packets from the ACVIM office.

A candidate intending to take a specialty examination must submit his/her credentials, including letters of reference, to arrive no later than October 1 of the year preceding that examination. Candidates may submit credentials following completion of a two-year residency, after 24 months of a three-year residency, or the equivalent time in any other approved program. Each

candidate will be notified no later than March 1 as to the acceptability of the submitted credentials.

D.2.g.2. Credentials may be submitted after completion of a two-year residency, after completion of 24 months of a three-year residency or within the final 12 months of any other acceptable training program. A previously ACVIM-Board-certified individual participating in a subsequent ACVIM-approved residency may submit credentials within the final 12 months of that training program. A candidate must submit his/her application, credentials documents and a non-refundable fee no later than October 1 of the year preceding the date of the specialty examination. For all specialties (except cardiology) the credentials documents and fee should be sent to the ACVIM office. Cardiology candidates should submit their credentials documents to the Chair of the Cardiology Residency Training and Credentials Committee, and the credentials fee to the ACVIM office. The credentials processing fee is due each time credentials are submitted.

D.2.g.3. Having successfully passed the credentials process of the specialty, a candidate must pay a fee to take the specialty examination. The same fee will be charged for each re-examination.

D.2.g.4. The specialty certifying examinations will be given at the site of the annual ACVIM Forum.

D.2.h. 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 were previously not approved and are re-applying must 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 Board of Regents. Fees may be made 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.i. Procedure for Re-application After Examination Failure

For candidates failing the general examination, the specialty examination or both examinations, the candidate must submit a Letter of Intent to the ACVIM office (and pay appropriate fees) to retake the respective examination(s). The Letter of Intent is due in the office no later than October 1 of the year preceding the year the examination is to be retaken.

D.3. Notification Process

Individual candidates will be identified only by social security numbers until the results of the examination are approved. The Specialty Examination Committee Chairs will then notify the specialty Presidents of the results of the examination. Results will subsequently be presented by the Examination Committee Chairs to the Board of Regents for approval. Candidates will receive written notification of the results of the examination within approximately 60 days from the date of the examination.

D.4. Appeals

D.4.a Appeals Committee

The Chair of the Board of Regents shall appoint two Diplomates from the Specialty of Internal Medicine, one representing small animal medicine and one representing large animal medicine, and one Diplomate from each of the other 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.

The Appeals Committee Chair organizes and conducts a telephone conference call with the Committee membership to review the appeal and render a decision on due process. The Committee is charged solely with determining whether due process 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

If a candidate believes that due process has not been followed by a Specialty Credentials or Examination Committee, the candidate may appeal.

Appeals must be in writing and sent to the ACVIM office. Appeals should consist of a brief letter summarizing the reason for the appeal. Appeals must be received within 30 days of notification of the candidate of the decision by the specialty committee. When an appeal is received, the Executive Director shall notify the Chair of the Board, 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 Credentials or Examination Committee shall submit to the Appeals Committee all data relevant to the candidate's appeal and a letter summarizing the reasons for the candidate's failure of the credentials or examination process.

The Chair of the Appeals Committee will call a meeting to review an appeal and notify the Chair of the Board, the Professional Liaison and the Executive Director of the results of that review within 30 days of notification of the appeal. The Professional Liaison will notify the candidate of the Appeal Committee's decision.

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

D.5. Certificates

D.5.a. Issuance of Certificates

Having passed both examinations and completed specialty credentials, the candidate must submit to the ACVIM office a copy of his/her residency certificate, or a letter from the Supervising Diplomate stating that the candidate has satisfactorily completed the approved training program. The ACVIM Certificates will not be awarded until all requirements are met. For the Specialty of Oncology, the Residency Training Committee must forward to the ACVIM Executive Director two lists of individuals who have passed the specialty examination -- those who have fulfilled specialty credentials and those who have not. The ACVIM office will prepare Certificates and publish lists of new Diplomates. Certificates will be awarded at the Annual College Business Meeting held during the Forum.

D.5.b. Repossession of Certificates

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

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

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

Reinstatement is contingent on the approval of the Board, 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 90 days of beginning Residency Training Program
What:	Registration Packet and Fee
Reviewed by:	Cardiology Residency Training and Credentials Committee
Response time:	8 weeks

General Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the examination
What:	Supervising Diplomate progress letter, two multiple-choice questions and fee
Reviewed by:	ACVIM Office
Response time:	30 days

Credentials for Specialty Examination

Send to:	Cardiology Residency Training and Credentials Committee Chair
When:	By October 1 of the year preceding the examination
What:	Credentials Packet
Reviewed by:	Credentials Committee
Response time:	Five months

Appeals

Send to:	ACVIM Office
When:	Within 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 30 days of receipt of appeal

E.1. Guidelines For Registered Cardiology Residency Programs

E.1.a. Description of the Program

E.1.a.1. Duration

The residency program must be at least 24 months in length and should follow at least one year of training (internship or its equivalent) in general medicine and surgery.

E.1.a.2. Environment

The program must be at an ACVIM-approved veterinary medical facility with a recognized program in cardiology 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 and Credentials Committee (CRTCC). Cardiology training must be actively supervised for at least 18 months by at least one ACVIM-certified Diplomate in Cardiology.

E.1.b. Program Supervision

E.1.b.1. The Program Director, Resident Advisor and Supervising Diplomate of all cardiology residency training programs must be ACVIM Diplomates certified in the Specialty of Cardiology.

E.1.b.2. The Cardiology Residency Training and Credentials Committee (CRTCC) shall maintain a registry of approved programs.

E.1.b.3. Program Directors shall complete and submit to the CRTCC a Residency Training Program Registration Form prior to any residents starting the training program.

E.1.b.4. Program Directors shall submit to the CRTCC an annual Program Update every year by August 15..

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. 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 by writing to the specialty secretary. Specific requirements during the residency include:

E.1.d.1. Catheterizations

Performance of at least 15 supervised cardiac catheterizations. For the purpose of these guidelines, cardiac catheterization procedures are defined as diagnostic catheterization and selective angiocardiography, 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. No one procedure can account for more than 4 of the 15 total procedures to fulfill this requirement. For example, a candidate may implant more than 4 pacemakers during the residency, but only 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 1 category. In other words, a candidate who performed 8 balloon valvuloplasties could count 4 of them as balloon valvuloplasty, and 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 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 principals and application of radionuclide angiography, magnetic resonance imaging, digital subtraction angiography, color-Doppler echocardiography, 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.j. 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 case load 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 Cardiology Diplomate(s) 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 a Cardiology Diplomate. Consultation with other qualified individuals should be encouraged, but cannot replace regular review by a Cardiology Diplomate. 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. An organized self-study program should be developed by the resident in consultation with a 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 Key* (available from the specialty Secretary) 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 which will 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. It will not normally be possible, therefore, 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 Secretary of the Specialty of Cardiology. Credentials packages should be mailed directly to the Chair of the Cardiology Residency Training and Credentials Committee.

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

One of the objectives of the Training and Credentials Committee is to establish criteria for acceptable nontraditional 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 year of training (internship or its equivalent) in general medicine.

E.2.a. Approval of the Program

The candidate must request evaluation of his/her program and obtain written approval from the Cardiology Residency Training and Credentials Committee prior to initiation of the nontraditional 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 nonconforming programs.

E.2.b. Requirements

Regardless of the variances that may be approved, every candidate must complete a minimum 24 months training program consisting of:

E.2.b.1. At least eighteen (18) months training under active supervision of a Diplomate of the ACVIM, Specialty of Cardiology. 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 months clinical training supervised by a Diplomate of the Specialty of Internal Medicine or a specialist in other related disciplines (including hospital affiliations) is required if training under item E.2.b.1 is not extended to 24 months. 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 nontraditional 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 a 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 days per block and a minimum of three months per year. For example, if a candidate completes the minimum three months training period yearly, the total number of years required to complete an equivalency program would be eight 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 Supervising Diplomate in the Specialty of Cardiology submit to the Chair of the Cardiology Residency Training and Credentials Committee 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 both the candidate and the Supervising Diplomate. Then each year, by October 1, the candidate or Supervising Diplomate must submit a letter to the Credentials Committee 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 Certifying Examination. Copies of all correspondence with the 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 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 Training and Credentials Committee at the end of the candidate's training program. The log forms can be obtained in writing from the Secretary of the Specialty of Cardiology.

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 Credentials Committee. 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 Residency Training and 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 Credentials Committee and the annual reviews are satisfactory, the Supervising Diplomate must forward verification of satisfactory completion of the program to the Chair of the Cardiology Residency Training and Credentials Committee.

E.3. Procedure for Certification in Cardiology

Applicant instructions, specific certifying examination details and instructions for meeting the credentials requirements are available upon request from the Secretary of the Specialty of Cardiology. Applications and all other supporting materials for the certifying examination must be received by October 1 of the year preceding that in which the candidate will write the examination. On or before this date, the following should be submitted to the Chair of the Cardiology Residency Training and Credentials Committee:

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 certifying 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). The set of questions must include the following:

- Ten multiple choice questions with a single best answer plus four distractors. "All of the above" is not an acceptable choice. These questions must be selected from at least seven different subject areas from the ACVIM Cardiology Subject Key (included in the application package from the specialty) with no more than two questions from one subject area. The subject area must be indicated clearly for each question.
- Three essay questions requiring between five and ten minutes to answer. These questions may be selected from any of the topics in the Cardiology Subject Index, including those for the multiple choice questions, but not more than one 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 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 six (6) copies of the original, a high quality glossy photograph, or 2" x 2" slide of the subject material.

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. Six copies of the completed cardiology application form.

E.3.a.4. Three letters of reference from cardiology associates with whom the candidate has worked during the training program. At least one must be an ACVIM Diplomate certified in the Specialty of Cardiology. It is preferred that a second reference come from an ACVIM Diplomate certified in the Specialty of Cardiology and the third from an ACVIM Diplomate certified in the Specialty of Internal Medicine. Each referee must send the reference letter or form to the Chair of the Cardiology Residency Training and Credentials Committee.

E.3.a.5. Credentials fees may be made by US bank check (US funds) or by MasterCard or Visa (see Section D.2.h.).

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 certifying 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 five separate binders, each containing one of each item. All original items should be included in one binder (Binder #1).

E.4. Cardiology Specialty Examination

The specialty examination in cardiology is a six-part examination taken over two 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. Kodachrome slides (8-12%), covering cardiac pathology, histopathology, cytology, radiography, and static recordings of non-invasive and invasive diagnostic studies (M-modes, Doppler, angiograms).

E.4.e. Graphics (15-20%), consisting of static phonocardiograms, ECGs, electrophysiology, echocardiograms, hemodynamics, special studies etc.

E.4.f. Videotape (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 Secretary of the cardiology specialty. No special equipment is required to write the examination, but candidates may wish to bring a ruler, calipers, calculator 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 members of the specialty.

F. SPECIALTY OF INTERNAL MEDICINE

Summary of Procedures for Candidate Certification ACVIM, Specialty of Internal Medicine

Registration

Send to:	ACVIM Office
When:	Within 90 days of beginning Residency Training Program
What:	Registration Packet and Fee
Reviewed by:	Internal Medicine Residency Training Committee
Response time:	8 weeks

General Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the examination
What:	Supervising Diplomate progress letter, two multiple-choice questions and fee
Reviewed by:	ACVIM Office
Response time:	30 days

Credentials for Specialty Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the examination
What:	Credentials Packet
Reviewed by:	Credentials Committee
Response time:	5 months

Appeals

Send to:	ACVIM Office
When:	Within 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 30 days of receipt of appeal

F.1. Minimum Requirements for Residency Training Programs in the Specialty of Internal Medicine

F.1.a. General Description

F.1.a.1. An acceptable internal medicine residency is a minimum 104-week intensive postgraduate clinical training program under the supervision of at least two Diplomates of the ACVIM, or at least one Diplomate of the ACVIM and at least one Diplomate of the European College of Veterinary Internal Medicine – Companion Animal.

F.1.a.2. The residency must be preceded by a minimum 12-month rotating internship in medicine and surgery or equivalent broad-based clinical experience.

F.1.a.3. The 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 Internal Medicine in an alternative 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). Alternative residency training programs must be submitted in advance to the Internal Medicine Residency Training Committee for approval. A candidate and his/her Supervising Diplomate will be responsible for documenting that the training has occurred as specified.

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

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

F.1.b.2. Of the 104 week clinical program:

F.1.b.2.a. a minimum of 52 weeks must consist of intensive clinical training in the Specialty of Internal Medicine with the trainee being under direct supervision of an ACVIM Supervising Diplomate in the Specialty of Internal Medicine. This Diplomate must be certified in the species (small animal or large animal) which pertains to the resident's training program.

F.1.b.2.b. a minimum of 16 additional weeks must consist of clinical training under the direct supervision of one or more Supervising Diplomates of the ACVIM in the Specialty of Internal Medicine, Cardiology, Neurology or Oncology (other than those referred to in F.1.b.2.a), and/or one or more Supervising Diplomates of the European College of Veterinary Internal Medicine – Companion Animal in the Specialty of Internal Medicine or Cardiology. These Diplomates are not required to be certified in the species (small animal or large animal) which 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 36 weeks should consist predominantly of clinical training in 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 104-week clinical training program is not continuous, it must be arranged in blocks of time no less than two weeks per block and a minimum total of 12 weeks per year. Consequently, if the candidate completed the minimum of 12 weeks training per year, a total of eight years would be required to complete a program with the remaining eight weeks considered to be vacation and meeting time.

F.1.b.4. The resident must spend the equivalent of at least 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 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.

F.1.c. Consultation

In addition to direct supervision as stated in D.2.d., 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 the management of patients seen, including receiving, diagnostics, 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, EEGs, 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 Internal Medicine Residency Program

F.1.h.1. Each residency training program must register with the ACVIM office prior to accepting residents for training. Forms for program registration are available from the ACVIM office. A specific Program Director (as defined in D.2.d. above) must be designated for each 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 Internal Medicine Residency Training Committee.

F.1.h.2. Program registration using the Residency Training Registration Form and annual Program Update is required (see D.2.c.1 and D.2.c.2).

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.

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 Internal Medicine

F.2.a. Applicant Instructions, Certifying Examination

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 Internal Medicine Credentials Committee in writing. The following must be included in the application.

F.2.a.1. Two copies of a letter signed by both the candidate and the Supervising Diplomate which specifically and clearly states that:

F.2.a.1.a. The candidate had primary case responsibility for the cases submitted as case reports;

F.2.a.1.b. The candidate did not have any assistance in writing, preparing, or correcting the case reports;

F.2.a.1.c. These case reports may be used in the future by the Specialty of Internal Medicine as examples of case reports.

NOTE: Candidates may review records with their Supervising Diplomates before they begin writing to determine whether a case is suitable for review by this process.

F.2.a.2. Two copies of the completed application form.

F.2.a.3. Two copies of the publication (See F.2.c.).

F.2.a.4. Two copies of the letter indicating that the candidate has passed the general examination. Note: This does not apply to individuals who are applying to take the specialty examination at the same time as the general examination. If this is the case, the candidate must include two copies of a letter to this effect and meet all of the general examination pre-requisites (see section D.2.f.2).

F.2.a.5. Two copies of the letter from the Residency Training Committee or from the ACVIM office which states that the candidate is in an acceptable training program. These need to be submitted only if the candidate has not already been approved to take the general examination. Otherwise, two copies

of the letter showing the candidate's results from the general examination will fulfill this requirement.

F.2.a.6. Seven copies of each of three case reports with the candidate's social security number (or other identification number) as the sole identification mark on each page. Rules regarding case selection and format are included in the credentials packet.

F.2.a.7. Two copies of three completed reference forms; the candidate must have three associates with whom he/she has worked as an internist provide these. At least one of the referees must be an ACVIM Diplomate certified in the Specialty of Internal Medicine. Each referee should forward the reference form as directed in the credentials packet. It is the candidate's responsibility to see that these arrive no later than October 1. If confirmation of delivery is desired, candidates must arrange for such (i.e. certified mail with return receipt).

F.2.a.8. Credentials fees may be made by US bank check (US funds) or by MasterCard or Visa (refer to D.2.h).

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. Late or incomplete application packages will not be reviewed by the Credentials Committee. COD packages will not be accepted.

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 upon request from the ACVIM office and are included in the credentials packet. The case report requirement is satisfied when the candidate accumulates two "passed" reports. Candidates must submit three reports with their initial application. If a candidate has one "passed" case report on file, then only two reports covering different organ systems than the "passed" case report would be due in a subsequent year. If none of the first three cases pass, three new reports must be submitted. Case reports once accepted will remain accepted.

Rejected case reports must be replaced with acceptable reports on different cases. The new case reports are submitted to the ACVIM office on or before October 1 of the year preceding the date the candidate wishes to take the examination. The candidate must also submit a credentials fee (see D.2.h.), the copy of the letter from the Credentials Committee Chair indicating the titles of case reports previously accepted and previously failed, and two copies of the letter described in F.2.a.1.

F.2.c. Publications

F.2.c.1. One publication, relevant to the discipline of veterinary internal medicine with the candidate as first author, is required of each candidate.

F.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 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 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 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 in writing and directed to the Chair of the Credentials Committee, prior to the submission of the credentials packet.

F.2.c.3. On October 1, copies of an appropriate published paper or copies of manuscript(s) pending acceptance must be submitted with the rest of the credentials. Manuscripts pending acceptance will be evaluated only if two copies of a letter from the journal are included. The letter must indicate that the manuscript has been received, has been accepted for publication, and is in the final editing process. If the manuscript has been accepted but not yet published, two copies of the letter of acceptance must be included or the publication will not be accepted. If you are unsure whether a response from a journal is considered as "acceptance," you should petition the Credentials Committee Chair for clarification prior to the application deadline. Publications must be in print or accepted for publication prior to March 1 immediately preceding the taking of the certifying examination.

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 three 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 Credentials Committee will consist of several subcommittees. Different subcommittees will evaluate applications in small animal practice and in large animal practice. There will usually be 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 which will be retained by the College. The comments will be compiled by the Chair of the Credentials Committee and a summary sent to each unsuccessful candidate. The candidate will then have an opportunity to submit a rebuttal to the Credentials Committee. Initially failed cases will then be re-reviewed by a second subcommittee. More specific guidelines on the grading of case reports are included in the credentials packet.

F.2.d.3. The Credentials Committee will notify the candidate of the acceptance or rejection of credentials on or about March 1 following the October 1 deadline for submission of the credentials. If a journal article is not accepted by March 1, the candidate will not be allowed to take the certifying examination. If the publication is accepted after March 1, the candidate should notify the Chair of the Credentials Committee by letter with a copy of the journal's acceptance letter. Such candidates will generally be allowed to take the specialty exam the following year. If the publication is rejected, the candidate must re-submit credentials, consisting of the letter from the Chair of the Credentials Committee indicating that basic credentials and case reports have been successfully completed, copies of the publication, and proof from the journal that this publication has been accepted.

F.3. Specialty Examination Format

The specialty examination in internal medicine is a three-part examination held over two days. The examination covers all aspects of veterinary internal medicine and comprises:

Multiple choice questions that are relevant to the species covered by the examination (i.e., large animal or small animal);

Essay questions (large animal or small animal);

Patient management (large animal or small animal). The patient management section is designed to test the candidate's ability to manage a patient through a disease process. Radiographs, photographs, ECGs, echocardiograms, etc. will be used in the patient management problems.

A candidate must pass each section of the 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.

More specific information on grading of the examination is provided in the instructions to candidates taking the examination which is distributed in March 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 90 days of beginning Residency Training Program
What:	Registration Packet and Fee
Reviewed by:	Neurology Residency Training Committee
Response time:	8 weeks

General Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the examination
What:	Supervising Diplomate progress letter, two multiple-choice questions and fee
Reviewed by:	ACVIM Office
Response time:	30 days

Credentials for Specialty Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the examination
What:	Credentials packet
Reviewed by:	Neurology Credentials Committee
Response time:	5 months

Appeals

Send to:	ACVIM Office
When:	Within 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 30 days of receipt of appeal

G.1. Guidelines for Neurology Residency Programs

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

G.1.a. Definition

G.1.a.1. A standard neurology residency is a two or three-year postgraduate training program under supervision of a Board-certified neurologist, 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). The two- or three-year program must be preceded by an

internship or equivalent experience. If a M.S. or Ph.D. program is included, the residency training program must be at least three years in length, with at least 75 weeks in clinical training in neurology. Standard 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 an alternative 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. If the 104-week clinical training program is not continuous, it must be arranged in blocks of time no less than two weeks per block and a minimum total of 12 weeks per year. Consequently, if the candidate completed the minimum of 12 weeks training per year, a total of eight years would be required to complete a program with the remaining eight weeks considered to be vacation and meeting time. Alternative residency training programs must be submitted in advance to the Neurology Residency Training Committee for approval. A candidate and his/her Supervising Diplomates will be responsible for documenting that the training has occurred as specified.

G.1.a.3. Programs must submit a Residency Training Registration Form and an annual Program Update (see D.2.c.1 and D.2.c.2).

G.1.b. Objectives for the Resident

G.1.b.1. By October 1 (assuming standard starting date of July 1) or within 90 days of the beginning of the program, the resident must register with the ACVIM office and outline the proposed program. Individual resident program registration is ultimately the responsibility of the resident's advisor. Notification that the resident's program has been approved/disapproved will be provided within 8 weeks to the advisor, with a copy to the resident. Correspondence will come from the ACVIM office.

G.1.b.2. The resident shall develop comprehensive, state-of-the-art expertise and clinical proficiency in neurology and patient management. Additionally, experience in the disciplines outlined in G.1.a.1. is recommended.

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 a Diplomate of the specialty who actively participates in the training program. Credentials for the specialty examination in neurology may be submitted at the completion of a two-year residency program or in the beginning of the third year of a three-year residency.

G.1.c.2. A graduate degree program (M.S.) which includes a research component may be included in a three-year residency program. If a Ph.D. program is completed, at least a four-year program is anticipated.

G.1.c.3. Objective of the Residency Program - The resident will receive sound academic and clinical training in neurology which 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 a Diplomate of the specialty 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. 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. Species - Residents should have exposure to large and small animal cases.

G.1.d. Advisor

G.1.d.1. Each resident should be assigned a Diplomate of the specialty as an advisor by the institution's Residency Program Director at the onset of the residency program.

G.1.d.2. The resident should meet with the advisor at the end of each six 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 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.

G.1.g. Clinical Service Rotations

G.1.g.1. The resident must be assigned to a clinical neurology service and supervised by the Diplomate Neurologist for not less than 75 weeks. The 75 weeks should include 50 weeks of direct supervision (see G.1.g.3) and 25 weeks of indirect supervision (face to face contact between the Supervising Diplomate Neurologist and resident on at least 4 days per week). Such experience may include electrodiagnostic services and neuropathology on

clinical cases. Up to 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 a Diplomate of ACVIM, Neurology.

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

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

Examples of appropriate scheduling:

<u>Rotation</u>	2-Year Program	3-Year Program
	<u>Weeks</u>	<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 case load 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 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 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. Neuropathologist - The resident should spend at least 50 hours during the residency with a neuropathologist. 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 should spend at least 50 hours participating in 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 advisor. The original should be retained by the resident and updated every 12 months. A copy should be sent/given to the advisor, program director and the credentials committee by the 1st of October following the end of each July-July 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 vitae should be provided to the 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 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 should coordinate this program with their advisor.

G.1.l.3. Weekly Conferences

G.1.1.3.a. The following conferences are strongly suggested: Resident Rounds, Medical Conference (large and small animal), Medicine Grand Rounds.

G.1.1.3.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.1.1.3.c. Attendance at Neurology/Neurosurgical Conferences at human hospitals is optional.

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.

G.2. Application Procedure for Certification in Neurology

G.2.a. Applicant Instructions

Specific details, instructions and application forms for meeting the credentials requirements and submitting a credentials application packet are available upon request from the ACVIM office.

G.2.b. Requirements for Application

G.2.b.1. Candidates must have registered a standard or an alternative residency training program with the ACVIM office (see D.2.a. and D.2.b.) and trained under the supervision of a Diplomate of the ACVIM, Specialty of Neurology, prior to submission of a credentials application packet. (See D.2.g. for credentials application information.)

G.2.b.2. Candidates who are certified in the ACVIM Specialties of Internal Medicine, Cardiology, or Oncology, who wish to be certified in Neurology, must complete a minimum of a 75-week training program in neurology under the supervision of a Diplomate of the ACVIM, Specialty of Neurology, which has been approved by the Neurology Residency Training Committee.

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

G.2.c. Application Deadline

G.2.c.1. The deadline for receipt 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 their 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 by March 1.

G.2.d. Number of Application Packets

The candidate must submit one original application packet (clearly identified) and four complete copies to the ACVIM office.

G.2.e. Candidate's Application Packet Contents

G.2.e.1. Application Form - A fully completed application form, supplied by the ACVIM office.

G.2.e.2. Documentation of General Examination Status - A copy of the letter from the ACVIM office stating that the candidate has passed the general examination or has applied to take the general examination in the same year.

G.2.e.3. Application and Examination Fees - Fees to submit credentials and/or to take the certifying examination (see D.2.h.) are the same as for other specialties of the College. Fees are not refundable.

G.2.f. 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 which should be sent to referees for use in preparing their reference letters. One of the three referees selected must be the Diplomate of the Specialty of Neurology responsible for the major part of the candidate's training program.

The referees should send their original reference letter and four copies directly to the ACVIM office, where they will be added to the candidate's application packets. 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 Certifying Examination consists of five 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 multiple choice 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 or copies of electrodiagnostic results.

G.3.d. An examination rating process, done under the supervision of the ACVIM, will be used to establish the pass point for the comprehensive written section of the examination.

G.3.e. Each of the five parts of the examination is graded separately and are autonomous from one another. To pass the Neurology Certifying Examination, the candidate must pass each of the five parts of the examination; once passed they need not be taken again.

H. SPECIALTY OF ONCOLOGY

Summary of Procedures for Candidate Certification ACVIM, Specialty of Oncology

Registration

Send to:	ACVIM Office
When:	Within 90 days of beginning the Residency Training Program
What:	Registration form; Registration fee
Reviewed by:	Oncology Residency Training Committee
Response time:	8 weeks

General Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the examination
What:	Supervising Diplomate progress letter, two multiple-choice questions and fee
Reviewed by:	ACVIM Office
Response time:	30 days

Credentials for Specialty Examination

Send to:	ACVIM Office
When:	By October 1 of the year preceding the specialty examination
What:	Credentials packet
Reviewed by:	Oncology Residency Training Committee
Response time:	5 months

Appeals

Send to:	ACVIM Office
When:	Within 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 30 days of receipt of appeal

H.1. Guidelines For Standard Oncology Residency Programs

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

H.1.a. Description of the Program

A residency program in oncology will require a minimum of 104 weeks in length of clinical training following at least one year of training (internship or equivalent) in general medicine and surgery. A minimum of 74 weeks must involve intensive training in clinical oncology. This 74-week period represents the minimum time that the candidate is directly 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 with the Supervising Diplomate(s) in the Specialty of Oncology. The minimum 104-week intensive training in clinical oncology must be structured in the following way:

H.1.a.1. Direct supervision (Section D.2.d.) for a minimum of 50 weeks.

H.1.a.2. Indirect supervision for an additional number of weeks to total 74 weeks, under the supervision of an Oncologist. The Supervising Diplomate(s) must be available for face-to-face contact at least one hour per day for 4 days per week.

H.1.a.3. Affiliated Rotations: In addition to the ≥ 74 weeks noted in H.1.a.1. and H.1.a.2. above, a minimum of 24 weeks must be spent actively receiving patients either with an ACVIM Diplomate in the Specialty of Oncology, or with Board-certified specialists in an allied specialty (e.g. ACVIM [Internal Medicine, Cardiology, Neurology]; ACVR [Radiation Oncology]; ACVS).

H.1.a.4. Supervising Diplomate(s) Choice of Additional Rotations: In addition to the ≥ 98 weeks noted in Sections H.1.a.1, H.1.a.2, and H.1.a.3. above, 6 weeks may be unsupervised.

H.1.a.5. Program registration using the Residency Training Registration Form and annual Program Update is required (see D.2.c.1 and D.2.c.2).

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 an alternative 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. If the 104-week clinical training program is not continuous, it must be arranged in blocks of time no less than two weeks per block and a minimum total of 12 weeks per year. Consequently, if the candidate completed the minimum of 12 weeks training per year, a total of eight years would be required to complete a program with the remaining eight weeks considered to be vacation and meeting time. Alternative residency training programs must be submitted in advance to the Oncology Residency Training Committee for approval. A candidate and his/her Supervising Diplomates will be responsible for documenting that the training has occurred as specified.

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. The resident should

have access to radiation therapy and a radiation therapist who is Board-certified in Radiation Oncology. The oncology resident should have a minimum of 4 weeks of direct contact with a radiation therapist 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 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 40 hours of direct contact exploring surgical histopathology is required during the residency.

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

The resident will actively participate in the management of oncologic 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.

In addition to directly supervised patient care, the candidate should also be involved in patient-oriented teaching rounds and formal teaching conferences such as clinical pathologic conferences, resident seminars, and grand rounds sessions. These teaching exposures must occur a minimum of several times each week during the residency training program. The format and schedule of these conferences and presentations should be included in a written proposal to, and approved by, the Specialty of Oncology.

The Supervising Diplomate should also periodically evaluate the resident (a minimum of once every six months) and should discuss the results of those evaluations with the candidate and be able to provide the Residency Training Committee with written summaries of those evaluations.

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. 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. 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.e. Research

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

H.1.f. Publications

The resident must have a minimum of one 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. Applicant Instructions

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.a.1. Seven copies of the completed application form.

H.2.a.2. Seven copies of the publication. (See H.2.b.)

H.2.a.3. Seven copies of the letter indicating that the candidate has passed the general examination of the ACVIM or seven copies of a letter indicating that the candidate is taking the general examination in the same year as the certification examination.

H.2.a.4. Seven copies of the updated curriculum vitae.

H.2.a.5. Items H.2.a.1., H.2.a.2., H.2.a.3., and H.2.a.4. should be arranged as follows: There should be seven binders, each of which has one copy of the application form, one copy of the publication(s), one copy of the letter (Item H.2.a.3.) and one copy of the curriculum vitae. These must be bound so that the contents will not fall out.

H.2.a.6. Reference Forms or Letters - Applicants must have three associates with whom they have worked in their training program submit seven copies of a letter of reference. At least one reference must be from an ACVIM Diplomate certified in the Specialty of Oncology. Letters should be mailed directly to the ACVIM office. A letter may be used in lieu of the form. It is the candidate's responsibility to ensure that the reference letters arrive before the October 1 deadline.

H.2.a.7. Credentials fees may be made by US bank check (US funds) or by MasterCard or Visa.

Send all of the above material, including the publication, if it is ready, 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. Late or incomplete application packages will not be reviewed by the Credentials Committee. COD packages will not be accepted.

H.2.b. Publications

H.2.b.1. All candidates must submit one publication (seven copies) on which they are first author.

H.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 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 relevant to veterinary medical 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.b.3. The publication must be in print or accepted for publication before the candidate will receive the certificate as Diplomate. The examination may be taken, but the certification process is not complete until the publication requirement is completed.

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

H.2.c. Evaluation Procedure

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

H.2.c.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 which will be retained by the College. 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.c.3. The ACVIM Office will notify the candidate of the acceptance or rejection of his/her credentials by March 1 following the October 1 deadline for submission of the credentials.

H.3. Specialty Examination Format

The Oncology Specialty Examination is a four-part examination given over a two-day period. The examination will usually be configured as follows:

- 1) Multiple choice - 150 questions.
- 2) Short answer - 50 questions.
- 3) Essay portion - 6 essay questions from which the candidate must choose 5 to answer.
- 4) Practical exam - 5 to 8 stations with several questions at each station. Case modalities will be used to present diagnostic and therapeutic problems. Problem-solving will be stressed.

The examination includes all aspects of oncology with special emphasis on medical oncology, but will include radiation and surgical oncology. 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 more) section(s) of the examination will require retaking and passing the failed section(s). The pass point for the multiple choice examination is established by the rating process. The pass points for the practical and essay sections are established each year by the Examination Committee after the rating process. Pass points for these sections will represent the knowledge and information which the Committee feels that a minimally qualified candidate must achieve; these sections will be rated by Diplomates of the Specialty of Oncology.