

Appendix 16

Guidelines for Fellowships in Specialized Veterinary Medicine

Why fellowships?

Fellowships have been helpful in both human and veterinary specialized medicine, where like-minded specialists create a formal means to advance the science of a focused area of study, providing learning opportunities beyond what residencies may provide. Knowledge and skills can be passed on from mentors to trainees in a narrowed and more in-depth aspect of the specialty. Fellowships may also provide a conduit for inter-specialty collaboration and learning that residencies may not provide. Though not a primary goal, fellowships may act as a stepping-stone for eventual development of an AVMA-recognized veterinary specialty.

Objectives of a fellowship

The objective of a fellowship program is to build upon knowledge and experience obtained during discipline specific training by an AVMA Recognized Veterinary Specialty Organization (RVSO). It is anticipated the fellowship will include a period of intensive applied training that should prepare its enrollees to successfully interact with other disciplines and to provide a leadership role in the area of study. It is expected that most graduates of fellowship training programs will devote a major portion of their professional effort to their fellowship discipline.

At what stage should fellowships be pursued/offered?

The focused nature of fellowships necessitates successful completion of a RVSO's certifying examination. However, certain requirements of the fellowship may be accrued after a candidate's credentials package has been accepted but prior to becoming a diplomate. The title of fellow would only be awarded upon satisfactory completion of all requirements and upon becoming a diplomate of a specialty that sponsors the fellowship.

Is cross-collaboration encouraged among multiple specialties?

Cross-RVSO collaboration is a potentially special aspect of fellowships, which provides the potential for educational opportunities that would otherwise not be available. If two RVSOs share a fellowship, there may be slight modifications of the requirements for each RVSO. Such collaboration requires identification of the organization(s) overseeing the fellowship and associate criteria for achieving fellow status.

Definitions

A. **Fellowship**—In regard to specialty veterinary medicine, a fellowship is a period of advanced study in a focused area of an existing veterinary specialty, consisting of research and clinical training beyond that which is required for certification in the specialty.

B. **Fellow**—In regard to specialty veterinary medicine, a fellow is considered to be a specialist who has successfully completed a fellowship training program and passed the fellowship committee's measure of competency. To earn the title "fellow" the individual must first achieve diplomate status.

C. **Fellowship training program**: A mentored training program of specific application, duration, curriculum, and evaluation established by an RVSO. Fellowship training programs are separate and distinct from RVSO requirements for diplomate eligibility. The specialty sponsoring the fellowship may choose to allow the period of fellowship training to begin following completion of residency training.

D. **Residency**—Advanced training in a specialty in veterinary medicine that is intended to lead to specialty certification in an AVMA-recognized veterinary specialty organization. A residency program is conducted per the requirements published by the RVSO. A residency is usually confined to a specific discipline.

E. **Founder or Founding Fellow**—A diplomate of the RVSO and member of the organizing committee of an emerging fellowship who will be involved in the successful submission of the fellowship's petition for recognition by the ABVS, development of the fellowship program, and assessment of fellowship candidates. A founder has received fellow status as a result of credentials that were submitted, reviewed, and approved during an open call by the RVSO for founding fellows. Founding fellow requirements may be fulfilled through:

1. Application for founding fellow at the initial call for founding fellows. Applicants completing all minimum criteria as defined by a founding fellow selection committee at the time of the call for founding fellows. The founding fellow selection committee is a group of specialists that are uniformly identified as

experts in the area of fellowship study. This group will be responsible for setting minimum criteria and reviewing applications of specialists interested in becoming founding fellows.

2. Application for an extension of consideration (of scholarly credentials): This one-time option, available during implementation of a new fellowship may apply only to a handful of individuals, is separate from the original call for founding fellows and would be available in cases where diplomates either did not act on the original call or did not fulfill the scholarly requirements for immediate acceptance as a founding fellow. If the application for extension is accepted, the applicant would be allowed an extension to complete scholarly requirements.

F. Primary mentors and program directors: A diplomate in good standing, who is a fellow or founding fellow, may mentor a fellow candidate or be on record as a program director in the appropriate discipline. Primary mentors and program directors must maintain diplomate status. The same individual may serve as both institutional program director and primary mentor.

G. Supervising mentor. Supervising mentors are those who are directly supervising the fellow candidate on a given day. Any founding fellow or fellow can be a supervising mentor.

H. Supporting faculty: Supporting faculty are all faculty, other than supervising mentors, involved in training of the fellow candidate. This includes: ABVS-recognized board-certified specialists of other disciplines as defined by the fellowship objectives, other diplomates who are not founding fellows or fellows, European diplomates, and research experts within the field of study.

I. Fellow Candidate: A person currently enrolled in a fellowship training program who has not yet completed that program. The fellow candidate may use this title in correspondence or other means of communication.

J. Terminology for a person who successfully completed a fellowship training program, but is not board-certified: A person who has completed a fellowship training program and has not passed the specialty certifying examination may indicate only that they have completed a fellowship training program in the discipline. No connection to the RVSO or RVS may be implied. Terms such as, for example, "ACVS Fellow eligible" should not be used. An individual who identifies their professional credentials using these terms may be eliminated from the approval process. An example of acceptable terminology is "residency and fellowship trained in X discipline". A candidate who has passed the specialty examination and fulfilled requirements of the fellowship but has not yet passed examinations (if any) associated with conveyance of the fellowship, may use

acceptable terminology such as “fellowship trained in X discipline”.

K. Terminology for a person who successfully completed a fellowship training program and is board-certified: RVSOs may instruct successful candidates to use the credentials “Fellow, INSERT RVSO ABBREVIATION HERE- INSERT FELLOWSHIP ABBREVIATION HERE” (examples: Fellow, AVDC-OMFS or AVDC Fellow-OMFS).

Proposed Fellowship Guidelines

Program Development:

Each fellowship program develops its own guidelines as to what is required for a candidate and should establish specific components to the training program, ensuring candidates meet minimum standards as determined by the specialty/specialties involved in creation of the program.

The following are the core components of a fellowship program:

1. Fellowship programs should be structured with robust instruction in a focused field of study.
2. The duration of fellowship programs may be variable based on the area of focus. One year of study may be reasonable for full-time fellowship candidates. Part-time fellowship candidates may spend two or more years obtaining direct supervision requirements. Deviations from the traditional timeline should be documented and justified with the RVSOs overseeing the fellowship program
3. Fellowship programs may utilize specialists in other fields, including AVMA-recognized specialty organizations, international specialty organizations such as the European colleges and counterparts in human medicine, for training of Fellows.
4. Fellowship programs must set objective standards that must be met for award of the Fellow designation. Measurable outcomes for the successful completion of these programs and mastery of the field of study may include:
 - a. Publication requirements
 - b. Research project completion
 - c. Presentation requirements

- d. Successful completion of a defined number of surgical and related non-surgical rotations
- e. Attendance at specified seminars, conferences, lectures, etc.
- f. Competency assessment by supervisor evaluation, module completion and/or examination
- g. Maintenance of activity and case logs to document required clinical and non-clinical experience.

Guidelines for Establishing a Fellowship Training Program:

Requests for approval of a fellowship program should include:

1. Justification for development of the fellowship program, including: i) evidence of a critical mass of diplomates within the field who desire to establish the program. ii) A description of the specific knowledge base or practice area that exists to merit a fellowship program.
2. Description of the proposed training program for the fellowship. This should include case type and number, activities, seminars, rounds, scholarly activities and any pertinent training timelines.
3. List and description of requirements (facilities, instructors) for programs providing training within the fellowship.
4. Proposed procedure for recognition of fellows completing the program, including a description of the proposed method for determination of mastery within the field.
5. Plan for organization and administration of the fellowship, such as the selection and duties of committee members.
6. Mechanism for demonstrating continuing professional development in the field.
7. Demonstration that there is currently no existing fellowship that provides a similar function for the interested group of veterinary specialists. Inter-specialty fellowships are encouraged where applicable. VSOC can provide guidance to ABVS and proposed fellowships in determining possible overlap.

Becoming a Fellow:

Founding Fellows

Existing diplomates may qualify as founding fellows. Diplomates initiating the program may recruit other qualified diplomates within a limited time to an “open call” to the specialty membership to apply for “Founding Fellow” status and to aid in establishment of a Fellowship Program.

Minimum requirements might include:

- a. Have an established reputation of excellence in the field as documented by three letters of reference from diplomates familiar with the individual's expertise both within and outside of the individual's institution.
- b. Have an established record of publication and presentation, as defined by the RVSO, in the fellowship's area of study.
- c. Have sufficient experience to have established an area of expertise (e.g., greater than 5 years experience)
- d. Can meet these requirements within a finite period (e.g., three years from announcement of the intent to form a Fellowship Program).

Diplomates who meet the minimum requirements would be granted the title of “Founding Fellow” in the specific field.

New Fellow Candidates

Founding fellows will act as mentors for new fellow candidates.

1. Candidates enrolling in a fellowship program must have successfully completed all requirements of an AVMA-recognized residency program and have been approved to sit for their specialty examination.
2. Candidates must successfully complete the fellowship program.
3. Since the fellowship builds upon residency training, the title of fellow is not conferred and may not be used until diplomate status has been achieved.

4. Fellowship programs are not subspecialties and the title of “fellow” shall not be referred to as a “subspecialist”.

Example of Possible Fellowship Training Program Requirements:

A. Fellowship training must be conducted at a facility (hospital or institution) that offers the scope, volume, and variety of caseload affected with conditions for the specific discipline as well as the complimentary services necessary to diagnose and treat patients.

B. Fellow candidates should have a broad exposure to techniques and procedures within the discipline. Training institutions will need to carefully consider whether they can provide the depth and breadth of training required before agreeing to participate in the training of a fellow.

C. The training program should include regularly scheduled educational events consisting of lectures, debate series, and/or journal clubs.

D. A written agreement crafted by the institution and signed by the fellowship candidate, fellowship mentor, and department head or hospital director to participate in the training of the fellow candidate should be formally documented prior to institution of the fellowship program. This agreement (known as the fellowship training agreement) will serve to define the clinical and educational relationship between the fellow candidate and the training institution(s) as to their responsibility to provide mentorship to the fellow candidate for the entirety of their program. The training agreement must specify the agreed duration of the training program (for example, minimum of one year, maximum of three years), which should be determined before training begins. The agreement is retained by the institution.

E. The institution may craft a statement to be signed by the fellow candidate. This statement may indicate that the fellow candidate understands that they must undertake their clinical role with the utmost integrity, care, professionalism, and responsibility to the institution and the patients whom they serve. The statement (known as a statement of compliance) may also specify expectations of day-to-day work responsibilities and schedules. Meeting the licensing requirements to practice at an institution is the responsibility of the fellow candidate. The candidate is expected to remain in good standing throughout the fellowship training program with both the training institution(s) and all state and federal licensing agencies.

Example of Possible Expectations of Fellow Candidates:

A. The fellow candidate must have completed a residency prior to beginning a fellowship training program (or for some fellowships, at least having been approved to take the specialty exam prior to collecting cases toward fellowship requirements). It is not necessary to be board-certified before beginning the program, but becoming board-certified is required before the individual can use the title of “fellow”. No aspects of the residency credentials process can be applied toward the requirements of fellowship training.

B. The fellow candidate should register with the sponsoring specialty college of the fellowship training program. Confirmation of receipt of the fellowship registration is received before cases can be counted to meet the requirements of the fellowship program. The fellow candidate must work with the program director and primary mentor to complete the registration form for fellowship training.

E. The fellow candidate shall keep a case log listing the cases. This should include the medical record number, the animal and client’s name, a description of the case, primary or first assistant on the case, and whether the case was directly supervised by mentoring faculty or non-supervised. The case log will be submitted along with the activity week logs to be reviewed by the appropriate fellowship oversight committee at regular intervals.

F. A fellowship training program may have a peer-reviewed manuscript requirement. The expectation may be that peer-reviewed manuscripts will be accepted within three years of initiating fellowship training and include required publications in the credentials application. The types of manuscripts and particular requirements for each fellowship training program will be detailed in the documents specific to the fellowship discipline.

G. The fellow candidate will undergo an assessment of competence, which may be an examination or direct assessment and feedback from mentors.

Example of Possible Expectations of Program Director and Primary Mentor:

A. The program director/ primary mentor must be diplomates, in good standing, and either a fellow or founding fellow.

1. Primary mentors and program directors must maintain specialty certification according to RVSO criteria.
2. The same individual may serve as both institutional fellowship director and primary mentor in the specific discipline.

3. The sponsoring veterinary specialty may place limits on how many fellow candidates may be mentored by a single mentor at a time.

B. The fellowship training program is considered an intensively mentored experience. This may require varying levels of direct supervision at different phases of the fellow candidate's training. Fellow candidates are required to have completed a residency and therefore should begin their fellowship training program with certain core competencies. Nonetheless, good decision-making in or for complex cases requires experience.

1. The fellow candidate must receive mentored assistance or observation on a case-by-case basis until such a time that the fellow candidate is competent to proceed with similar cases unassisted and unobserved.
2. A supervising mentor must be available for consultation at all times during fellowship training. While the primary mentor may not be personally available at all times, he or she should ensure that there is mentorship available at all times.

C. The program director must assure each fellow candidate's progress is formally evaluated in writing and feedback provided to the fellow candidate at least semi-annually.

1. The program director or the primary mentor can perform this function.
2. The fellow candidate should be advised of any deficiencies at semi-annual reviews of the fellowship training program and an immediate performance improvement plan put in place if deficiencies are identified. If satisfactory improvement is not met in the specified time frame, the fellow candidate can be dismissed from the training program.

D. The fellowship program director must provide an opportunity for fellow candidates to evaluate the overall fellowship training program, as well as all educational events, rotations, conferences, and faculty.

E. The fellowship program may be required to provide all fellow candidates evaluations of their program for review by the RVSO's fellowship committee to determine whether the goals of the training program are being achieved and whether ancillary institutions/faculty are effective in their training mission.

Example 1: Specific Program Requirements from the American College of Veterinary Surgeons (ACVS)

- A. The ACVS Fellowship Oversight Committee will review for approval each fellowship training program request by a fellow candidate. Requests to initiate programs must be made at least 60 days prior to the start of the fellowship training period to allow time for the fellowship oversight committee to review the program plan. The approval of the program will remain in force for 3 years providing no substantive changes in the program structure or personnel occur.
- B. Review of the primary training institution's oversight of fellowship training programs will occur once every three years or when substantive changes occur to ensure the minimum standards are met. On behalf of each primary training institution, program directors shall submit documentation for each fellow candidate participating in the fellowship training program over the last three years to the fellowship oversight committee.
- C. A fellow candidate may complete a fellowship training program in a minimum of one year but all requirements must be completed over a maximum three-year period. The terminology used for training options include "full-time fellowship training", for fellowship programs of approximately one-year duration. A training program significantly longer than one year is defined as "part-time fellowship training".
- D. Part-time fellowship training can be organized as continuous; i.e., the fellow candidate is employed full-time at the mentor's institution, but assigned to fellowship training only part of the time. Part-time fellowship training can be intermittent; i.e., the fellow candidate is employed elsewhere, when not in active fellowship training
- E. The fellowship training program must include a minimum of 40 weeks on clinics. A fellow candidate's clinic "week" is defined as at least five full workdays along with appropriate after-hours case management (nights and weekends).
- F. Outside rotations in human hospitals can be part of ACVS fellowship training program. Specific requirements for each ACVS fellowship training discipline will be as the discretion of the fellowship oversight committee for that discipline.
- G. There is an expectation that fellowship training candidates will attend focus meetings in their discipline. Specific requirements for each fellowship training program will be defined by the fellowship oversight committee in that discipline.
- H. Up to 7 weeks of the 52 weeks of the Fellowship training program can be used for research and/or board preparation.
- I. Two additional weeks are to be scheduled for vacation.

J. Continuous part-time fellowship training programs longer than one consecutive year must include clinical rotation blocks of no less than one consecutive week. Intermittent part-time fellowship training programs longer than one consecutive year must include clinical rotation blocks of no less than two consecutive weeks to ensure an appropriately intensive clinical experience.

K. Regularly scheduled educational events consisting of attendance at case conferences/journal clubs covering surgical topics appropriate to the discipline, basic science, clinical research and rehabilitation should be organized. These should be outlined at the beginning of the fellow candidate's program and involve a broad cross section of the above topics. Specific numbers of educational events will be determined by the fellowship oversight committee in that discipline.

L. Presentation of comprehensive case discussions may be required as defined by the fellowship oversight committee in the discipline. An acceptable audience includes their fellowship mentors but may include other ACVS Diplomates and residents. The cases presented should represent complex multi-disciplinary approaches to the management of a surgical patient. The intention of the audience is to prepare the fellow candidate to successfully interact with the other related disciplines and to provide a leadership role in the link between the disciplines. Case presentations may be teleconferenced to enable participation of a number of ACVS Fellows or Founding Fellows.

M. Required learning objectives for ACVS fellowship training programs

1. Radiology – Each ACVS fellowship training discipline will set specific learning objectives pertaining to diagnostic imaging. Mastery of these learning objectives must be documented by the ACVR diplomate radiologist who was identified as participating faculty at the start of the fellowship training program. If the fellowship training program is designed such that focused clinical weeks (rotations in radiology) must occur in order to master the required training objectives, such clinical weeks (rotations) must occur in addition to the 40 clinical training weeks specified for surgical case experience.

2. Anesthesiology – Each ACVS fellowship training discipline will set specific learning objectives pertaining to anesthesia. Mastery of these learning objectives must be documented by the ACVAA diplomate anesthesiologist who was identified as participating faculty at the start of the fellowship training program. If the fellowship training program is designed such that focused clinical weeks (rotations in anesthesiology) must occur in order to master the required learning objectives, such clinical weeks (rotations) must occur in addition to the 40 clinical training weeks specified for surgical case experience.

3. Ancillary Specialty Learning Objectives – ACVS fellowship training discipline will set specific learning objectives pertaining to their specific training discipline.

N. Minimum case requirements: Minimum case requirements for ACVS fellowships performed under ACVS Fellow or Founding Fellow membership in the appropriate discipline will be set and determined by the individual ACVS fellowship training programs. The fellow candidate can either be the primary surgeon or first assistant on the case in order for the case to be counted toward case minimum. If multiple fellow candidates scrub on a case, only one person can count as primary and one as first assistant.

O. The type of surgical procedures for each ACVS fellowship training program must demonstrate sufficient depth and breadth of diversity and advanced skills. The distribution of cases will be determined by each of the individual ACVS fellowship training programs. The primary mentor must sign off on all surgical case logs at the end of the fellowship training.

P. The primary mentor, the program director, and supporting faculty will determine if the fellow candidate has successfully completed the fellowship training program at the end of the fellowship training program. The fellow candidate must submit the following within three years of initiating the fellowship training program to be considered for the designation of ACVS:

1. Letter of intent to become an ACVS Fellow in the discipline of training.
2. Supporting letters from the program director and primary mentor indicating successful completion of the program.
3. All supporting documentation (case logs, signed documentation of other required specialty training, case presentations, publications, etc.). Review by the fellowship oversight committee, ACVS Fellowship Committee and ACVS Board of Regents will occur within 6 months of submission of materials to the ACVS office.

Q. Activities of the fellow candidates in ACVS Fellowship Programs will be monitored by the fellowship oversight committee. The fellowship oversight committee will provide a report to the ACVS Fellowship Committee each fall specifying:

1. Number and location of fellowship programs
2. Names of fellow candidates pursuing fellowships
3. Results of requirement completion

4. Requests for program modification

R. After fellow candidates successfully complete all program requirements, the ACVS Board of Regents will grant fellow status based on the recommendation of the fellowship oversight committee and review of the ACVS Fellowship Committee.

Example 2: Specific Case Requirements from American Veterinary Dental College Oral and Maxillofacial Surgery Fellowship (AVDC OMFS)

AVDC OMFS Fellowship Minimum Required Case Log Requirements

Category 1: Surgical treatment of oral and facial tumors requiring partial or complete mandibulectomy – **8 cases***

Category 2: Surgical treatment of oral and facial tumors requiring maxillectomy – **6 cases ****

Category 3: Surgical closure of congenital or acquired palate defects acquired after birth– **4 cases *****

Category 4: Treatment of maxillary or mandibular fractures by application of bone-borne devices such as plates, wires or cross pins/half-pins – **6 cases ******

Category 5: Treatment of maxillary or mandibular fractures by application of a wire-reinforced intraoral tooth-borne splint – **6 cases**

Category 6: Treatment of maxillofacial conditions requiring repositioning and internal fixation, and/or osteotomy/ostectomy, of osseous structures associated with the maxillary and/or orbital bones, zygomatic arch or mandibular coronoid process or condyle – **3 cases ******

Category 7: Surgical treatment of salivary gland disorders – **3 cases**

Category 8: Local, subdermal plexus or axial pattern pedicle flaps for closure of traumatic or surgical OMF soft tissue defects involving the dermis – **4 cases** *****

Category 9: Surgical management of miscellaneous challenging OMFS conditions. Qualifying procedures may include: extraction of impacted teeth, enucleation of odontogenic cysts or tumors (when indicated), root tip retrieval from nasal cavity or mandibular canal, surgical management of osteonecrosis, marsupialization procedures – **5 cases**

Category 10: Management of soft tissue neoplasms not requiring ostectomy – **3 cases**

Category 11: Management of traumatic soft tissue injuries (e.g., lip avulsion, lip laceration, tongue laceration and avulsion) – **3 cases**

Category 12: Medical management of temporomandibular conditions – **2 cases**

*Category 1 shall include at least 1 total mandibulectomy, 1 segmental mandibulectomy, 1 bilateral rostral mandibulectomy, and 1 dorsal marginal mandibulectomy (i.e., mandibular rim excision).

**Category 2 shall include at least 3 caudal maxillectomies. Procedures that do not penetrate the nasal cavity would not fulfill this category.

***Category 3 may include closure of oronasal fistula (ONF) caused by periodontal disease, though no more than 1 of the 4 cases can be dental-related ONF cases.

****Categories 4 and 6 shall include at least 4 cases involving placement of plates (standard, reconstruction or miniplates), and 4 cases in which a bone-grafting technique or application of rhBMP2 is used.

*****Category 8 shall include a minimum of 2 axial pattern flaps. One case may be performed on a dog or cat cadaver but must be documented with image material and supervised as a clinical case. One case may also be performed in a non-OMF region when performed with an ACVS/ECVS boarded surgeon. Note that intraoral mucosal flaps that do not include dermis do not satisfy the requirements of this category.

Note: a 'case' can be included as meeting the MRCL requirement under only one

category unless a technique in Category 8 is used for reconstruction following treatment using a technique in a different category, e.g. following maxillectomy. A total of 5 procedures may be performed on a cadaver.

Recommended Oncology Rotation Learning Objectives

1) 2-week rotation in medical and radiation oncology

2) Medical Oncology

- know the rationale and indications for chemotherapeutic agents for the treatment of OMF neoplasms
- know the indications for pre and/or postoperative adjunctive chemotherapy for OMF neoplasms
- observe and be familiar with complications associated with the administration of chemotherapy for the treatment of OMF neoplasms
- observe and be familiar with the treatment of complications associated with the administration of chemotherapy for the treatment of OMF neoplasms
- review the outcomes of chemotherapy for a minimum of 10 OMF cases with a board-certified medical oncologist

3) Radiation Oncology

- know the basic principles of radiation therapy for the treatment of OMF neoplasms
- know the rationale and indications for radiation therapy for the treatment of OMF neoplasms
- know the indications for pre- and/or postoperative adjunctive radiation therapy for OMF neoplasms
- observe and be familiar with mapping techniques and dosage regimens for administration of radiation therapy for the treatment of OMF neoplasms
- observe and be familiar with complications associated with the administration of radiation therapy for the treatment of OMF neoplasms
- observe and be familiar with the treatment of complications associated with the administration of radiation therapy for the treatment of OMF neoplasms

- review the outcomes of radiation therapy for a minimum of 10 OMF cases with a board-certified radiation oncologist

4) Multimodal therapy

- know the rationale and indications for multimodal therapy for the treatment of OMF neoplasms