# Dermatology Residency Training Program Texas A&M University School of Veterinary Medicine & Biomedical Sciences

## **Primary Mentor**

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#### Co-Mentor

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#### **Additional Educators**

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Within the veterinary teaching hospital, the resident will also have access to board certified clinicians in internal medicine (SA - 8; LA/Equine - 8), emergency and critical care (3), neurology (5), cardiology (3), oncology (4), radiation oncology (2), ophthalmology (3), surgery (SA - 10; LA/Equine - 7), anesthesia (4), radiology (7), dentistry (1), zoo/avian medicine (1), rehabilitation (3), clinical pathology (3), clinical immunology (1), clinical pharmacology (1), and clinical microbiology (3).

## **Program Overview**

The residency program will be a three-year, individualized program. Pending approval, the residency would begin July 15, 2022 and be completed July 15, 2025. The resident is expected

to qualify for and sit the ACVD board examination in 2025 having met all requirements for residency completion as outlined by the College.

#### **Facilities and Equipment**

The Veterinary Medical Teaching Hospital (VMTH) is a fully accredited hospital (AVMA Council of Education) that contains full service small and large animal medicine and surgery services as well as numerous specialty services with full accreditation. The facility is also connected to the Texas A&M Veterinary Medical Diagnostic Laboratory, the state diagnostic laboratory that offers full service diagnostics including but not limited to clinical pathology, immunology, immunohistochemistry, and virology support. Texas A&M VMTH is additionally home to the Gastrointestinal Laboratory, a specialized laboratory involved in studying gastrointestinal disorders in dogs and cats. The Diagnostic Imaging and Cancer Treatment Center (DICTC) at the VMTH houses a state-of-the-art helical tomotherapy radiation delivery system, 40 slice helical CT scanner, and 3 Tesla MR unit. Additionally, and under the umbrella of the School of Veterinary Medicine (SVM), the Texas A&M Institute for Preclinical Studies (TIPS) provides resources (including a PET CT scanner) and collaboration opportunities in translational medicine and development of research models in animals with naturally occurring diseases.

Texas A&M University's (TAMU) library system consists of 6 branches; the Medical Sciences Library (MSL) is connected to the SVM via an underground tunnel between the two buildings. The MSL possesses hard copies of both human and veterinary medical texts, bound serial publications and journals, and offers extensive online electronic journal (and text) access. Materials not directly housed in the MSL are available free of charge via "Get It For Me" – an electronic document delivery service available for publications elsewhere on TAMU campus or obtained from other non-TAMU libraries around the world.

The dermatology service currently has two video otoscopes (OtoPet VetScope View 1.3 and MedRx Deluxe Video system), a single headed microscope (Olympus BX41) with photographic equipment and software (Spot FLEX 64mp), a dual headed microscope (Olympus BX40), and a hand-held cryosurgical unit (Verruca Freeze®). Additionally, the dermatology service has shared use of a CO2 surgical laser with the small animal surgery department (Cutting Edge CO2 MLO30). A 14-headed microscope (Olympus B205) with camera and projection ability is used for teaching during dermatopathology rounds. The VMTH has a professional medical photographer on staff for acquisition of visual aids and images for publication purposes. Additionally, a full service Creative Technologies department is available for assistance with multimedia needs including slide production, image design, prints, and poster presentations.

## **General Qualifications**

Dermatology resident candidates must:

- 1. Be a graduate from an AVMA approved veterinary school/college, or a graduate from an accredited and recognized school from another country.
- 2. Have completed a one-year small animal medical/surgery rotating internship, or comparable practice equivalency.

- 3. Be licensed to practice veterinary medicine in the United States and in the state of Texas (or eligible to sit for the state of Texas veterinary board examination upon arrival).
- 4. Be a member of the AVMA or equivalent National Veterinary Medical Association.
- 5. Be of satisfactory moral and ethical character including, but not limited to, being honest and truthful, not be habitually intoxicated or addicted to drugs, and not have been convicted of cruelty to animals.
- Fulfill any additional dermatology residency candidate requirements as specified by the ACVD Education Committee. A complete list of requirements may be found on the American College of Veterinary Dermatology website (<a href="www.acvd.org">www.acvd.org</a>).

## **Goals and Objectives of the Program**

The goals and objectives of the dermatology residency training program at TAMU are as follows:

- 1. To train competent and effective specialists in veterinary dermatology.
- 2. To provide in-depth clinical training in veterinary dermatology.
- 3. To provide in-depth basic science training as it relates to veterinary dermatology.
- 4. To provide in-depth dermatohistopathology training suitable for veterinary dermatology board examination preparation.
- 5. To prepare the candidate for successful completion of board certification in the American College of Veterinary Dermatology (ACVD).

### Caseload

The current caseload of the Texas A&M Dermatology service is based off of a 4-5 day receiving schedule; approximately 815 cases are seen by the service annually (approximately 2445 over three years). The distribution is approximately 83% dogs, 10% cats, 5% horses, and 2% exotics/other species (goats, camelids, etc.).

## **Format of Training Program**

- The dermatology residency program at Texas A&M is a full-time 3-year program. The
  training program will begin July 15, 2022 and will be completed July 15, 2025. The
  resident will be selected via the Veterinary Internship and Residency Matching Program
  (VIRMP) or through an out-of-match selection. There is the possibility that an additional
  resident may be added during the resident's training program pending
  departmental/school support.
- 2. The residency program at Texas A&M will adhere to the guidelines set forth by the ACVD. While successful completion of board certification with the ACVD, including passing the veterinary dermatology board examination, is a primary goal of the program, the residency in veterinary dermatology at Texas A&M is not designed to "teach to the test." Rather, the training program is meant to provide the resident with adequate time to develop clinical, teaching, writing, and research skills sufficient for success as a veterinary dermatologist. Training in basic sciences and

dermatohistopathology however will meet or exceed the current ACVD guidelines set forth for successful completion of the certifying examination.

- 3. Training time will be divided between the following:
  - a. Observational training (year 1 only)
  - b. Clinical training
  - c. External rotations (Internal Medicine (if deemed necessary by preceptors), dermatopathology, preceptor-approved externship)
  - d. Off clinics (reading, research, case reports, manuscript preparation, presentations)
  - e. Continuing education (annual NAVDF attendance, other preceptor-approved programs)
  - f. Vacation
- 4. Division of time for the residency program at Texas A&M is designed to meet or exceed the current guidelines set forth by the ACVD. The VMTH clinic schedule is based on a 48-week academic year; 4 weeks each year are counted as "holiday time" and cover Christmas, New Year, and Spring Break. Additional University Holidays are granted yearly by Texas A&M; these days are considered as "off clinics" and not counted into the table described below. Two weeks of vacation will be allowed yearly as per ACVD guidelines. The resident must follow TAMU policy with regards to vacation leave time.
- 5. The Dermatology service receives cases Monday through Friday, with the second Friday of the two week rotation with no cases scheduled; Saturdays will always be considered "off clinic".

Table 1: Division of time in weeks/days

	YEAR 1	YEAR 2	YEAR 3	<b>Total Weeks</b>
OBSERVATIONAL	2-4w (10-20d)	0	0	2-4w (10-20d)
TRAINING				
CLINICAL	39-43w (195-	39-41w (195-	39-43w (195-	117-127w (585-
TRAINING/RECEIVING	215d)	205d)	215d)	635d)
EXTERNAL	0-2w (0-10d)	0-2w (0-10d)	0-4w (0-20d)	0-8w (0-40d)
ROTATIONS				
OFF CLINICS	4w + 20-22 Fridays	8w + 20-21 Fridays	6w + 20-22 Fridays	18w + minimum 60 Fridays = total 150 days (* does not include extra University holidays)
CE MEETINGS	1w	1w	1w	3w
VACATION	2w	2w	2w	6w

Totals	52w	52w	52w	156w
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- 6. All clinical training will occur within the VMTH under direct supervision of Dr. Patterson. Dr. Patterson will be available to examine cases with the resident during the entire residency; one or both mentors will always be available in the VMTH or will be contactable by phone and available to assist the resident within one hour of being called. During the third year of residency, the resident may be placed in charge of the clinical service and student group (under guidance of a senior clinician) for up to 4 weeks (with mutual agreement of the resident, mentors, and department residency committee).
- 7. While on clinic duty, the resident will have primary case responsibility for dermatology cases (except during Observational Training). The dermatology service receives cases 5 days each week and provides in-house consultations for other services. The service schedules approximately 15-18 cases per week (not including consults). The resident will have primary case responsibility for no fewer than 50% of the scheduled cases. The current average caseload is 818 (past four year average, with two full time dermatologists on service). This will provide the resident with an expected caseload of 2445 during their residency program. Additionally, the resident will have primary consulting responsibility for all formal and informal consults (interservice, staff, students) requested by other small animal services, large animal services, and zoo medicine. All consultations performed by the dermatology service will be overseen by either Dr. Patterson.
- 8. During the first year of residency, up to two weeks of additional training may be provided by the VMTH Internal Medicine service if deemed necessary by Dr. Patterson; this will be dependent upon the individual candidate's prior experience and confidence level at the beginning of residency. The resident will also spend dedicated time with the dermatopathologists (Drs. Wiener and Stranahan) to strengthen comfort in dermatohistopathology. Additional external rotations may be arranged/supported by the preceptors during the three-year program. Options may include experience in private dermatology practice, other universities, or other alternative options to be considered/approved by preceptors. All additional training discussed here would be considered under the category of "External Rotations" in the chart above.
- 9. A total of 18 weeks plus an additional minimum of 60 days (Fridays) over three years will be considered "off clinics" and thereby free of daily clinical responsibility. During this time, the resident is expected to devote this time to reading, research project development and execution, manuscript/seminar/lecture presentations, and personal study for the certifying examination.
- 10. Six weeks (2 weeks per year) will be allotted to vacation time over the course of the residency.

11. The dermatology resident will be expected to attend the North American Veterinary Dermatology Forum (NAVDF) and ACVD resident education forum (or equivalent conference) annually. A full week will be allotted yearly for travel and conference attendance.

### **Resident Expectations During Clinical Training**

During the 117-127 weeks of clinical training, the resident will be expected to satisfactorily complete the following:

- 1. Participate in clinical activities and accept primary case responsibility for dermatologic cases. This includes but is not limited to: history taking, physical examination, formulation of lists of differential diagnoses, suggestion and performance of appropriate diagnostic tests and procedures, selection of medical therapy, development and maintenance of patient-specific medical records, follow-up, and communications with clients and referring veterinarians. The resident will be expected to consult and discuss cases with the dermatology faculty on a daily basis, and will obtain consultation with other faculty at the VMTH on a case-specific basis.
- 2. Participate in at least weekly resident case rounds with the mentor(s) to discuss challenging or unique cases the resident encountered during receiving. These rounds are designed to discuss and explore a more in-depth understanding of the clinical and didactic aspects of conditions seen in dermatology practice.
- 3. Participate in and develop teaching skills through instruction of senior veterinary students, as well as more junior students (years 1-3) who spend time periodically shadowing the dermatology service. This will include but is not limited to participation in case discussions with the students during receiving, daily case and topic rounds, and supervising diagnostic procedures performed by the students on the dermatology rotation.
- 4. Provide in-house dermatology consultations for both the small and large animal hospitals. Consultation on zoo medicine species will also be provided by the resident under guidance of all involved senior clinicians (dermatology preceptors and zoo medicine specialists). Additionally, the resident will be responsible for participation in phone/e-mail consultations with referring veterinarians. Responsibility for this service will increase as the residency program progresses.
- 5. Participate in telemedicine consultations/appointments for existing clients and referring veterinarians under the guidance of mentor(s). Currently Texas A&M uses the VetNow platform for referring veterinarian consultation. Client telemedicine appointments may occur with the same platform or via Zoom. Responsibility for this service will increase as the residency program progresses.

6. Maintain a detailed case log containing the following information: hospital case number, client/animal name, signalment, diagnosis, and follow-up information. Records of consultation cases will be additionally included in the case log. The information contained within the log will be used to help mentors assess case numbers, follow up, and case variety to which the resident is exposed during the training program. The case log will be provided to the preceptors yearly for evaluation and review. The final case log will be retained by both the resident and preceptors until the resident becomes a diplomate or for 5 years after completion of the residency (whichever comes first), in accordance with the ACVD Education Committee guidelines.

## Resident Expectations During Non-Clinical Training/Off-Clinics Time

During the 18 weeks (plus at least 60 Fridays) of non-clinical training/off-clinic time, the resident will be expected to satisfactorily complete the following:

- Initiate and complete at least one research project during the course of the residency; the resident must be the principle investigator for the project under direction and guidance of the preceptors. During the first year of the program, the resident will be expected to identify an area of interest and develop a research project that will be investigated during the first and/or second year of training. The project will be reviewed by three boarded dermatologists to comply with the ACVD Education Committee guidelines. Both mentors will review the project along with either a) the ACVD grant committee, b) a third boarded dermatologist (TBD at this time), or c) another veterinary specialist based on the proposed research topic (e.g. microbiologist, pathologist, internist, etc.). It is additionally expected that the resident will prepare a grant for possible funding of the project either through the ACVD grant committee and resident research award or other outside funding source. This is to serve as an educational experience as well as obtain additional review of the proposed research project. If extramural funding is not secured, departmental/service funds will be made available for project completion. The resident will have primary responsibility for project execution, manuscript preparation and submission. Time will be allotted during the second and third year for project execution and manuscript preparation/submission to ensure ACVD credentials guidelines are met prior to residency completion.
- 2. Complete and submit a first-authored publication of the research project executed during the course of the residency. The publication must be accepted by an approved peer-reviewed journal in accordance with the current guidelines of the ACVD Credentials committee. A letter of acceptance for publication by the journal will be submitted to the Credentials Committee by June 30 of the year of the resident's anticipated Certifying Examination. Although not required, completion of a second manuscript suitable for publication is highly encouraged during the residency program.

- 3. Prepare and deliver one podium presentation of the resident's research project at an annual NAVDF meeting (or equivalent conference) during the second or third year of residency, depending on research project completion. This presentation is to meet the requirements outlined by the ACVD Credentials Committee. Additional posters or presentations are highly encouraged for presentation at NAVDF during the residency program.
- 4. Prepare two successful case reports or case report equivalents as required by the ACVD Credentials Committee. The resident is strongly encouraged, though not required, to pursue the publication option for at least one of the required reports. Non-clinical time will be allotted at specific time points to assure that the resident meets expected submission dates for these reports as outlined by the ACVD Credentials Committee.
- 5. The resident may be occasionally expected to assist in didactic and laboratory instruction of students in the professional curriculum; the resident will not however head nor have major teaching responsibilities of any course, elective or didactic. Individual lectures may however be assigned to the resident during the second and/or third year of training to allow development of non-clinical teaching skills.
- 6. Deliver at least four scientific/educational lectures during the residency program. Each lecture will be at least 30 minutes in length and on a topic related to veterinary dermatology. Three of these lectures will be an annual presentation in the department Intern-Resident Seminar Series (45-50 minute presentation each year). The fourth lecture may be presented during house officer seminars, internal medicine resident boards preparation course, at continuing education meetings provided by the VMTH, other local/state/national meetings, or to veterinary student and/or staff groups in the VMTH (e.g. student club meetings). Each of the resident's presentations will be attended by at least one of the mentors.

### **Non-Clinical Training**

To ensure that the resident receives adequate basic and applied science training in veterinary dermatology, the following non-clinical training will be instituted during the residency program. These items will occur during both clinical training/receiving and non-clinical training/off-clinic times during the residency.

1. The resident will receive substantial training in dermatohistopathology at the light microscopic level during the course of the residency. This will be provided through multiple formats. Dermatopathology rounds are held every other week for 1 hours; the resident will be required to attend these rounds during both on and off clinic time for all three years of the program. These rounds are attended by dermatologist (Dr. Patterson), both dermatopathologists (Drs. Wiener and Stranahan), interested pathology residents and students on the dermatology rotation. During the first year of residency training, the resident will also attend structured training in dermatopathology taught by Drs. Rodrigues-

Hoffmann and Wiener. This 12-hour training course is currently taught to pathology residents to provide both an introductory and more in-depth approach to evaluating skin histopathology samples, sufficient for board preparation. This may be repeated in year 3 of the program if the resident elects to do so. A teaching set of slides will be provided to the resident by Drs. Rodrigues-Hoffmann and Wiener. Examples from the teaching set will be assigned on a every other week basis for review with the dermatopathologists along with dermatopathology rounds (unknown slide reading) (2 hours). Additionally, the resident will be responsible for direct evaluation of all histopathology slides taken from biopsies of all of his/her cases. These will be reviewed monthly with either Dr. Rodrigues-Hoffmann and Wiener (1 hour). Finally, during the course of the training program, the resident will periodically be provided with "unknown" slides that will be examined and a histopathology report generated to include the species of animal, histopathologic abnormalities, morphologic/pathologic diagnosis, and a specific or list of differential diagnoses. These reports will be reviewed and evaluated by at least one of the dermatopathologists. By the end of the residency, the resident will be able to evaluate 6-7 unknowns and provide reports within four hours of less. Progress in the understanding of dermatopathology principles will additionally be monitored by Dr. Patterson.

- 2. During the first year of residency, up to two weeks of training may be provided by the VMTH Internal Medicine service if deemed necessary by Dr. Patterson; this will be dependent upon the individual candidate's prior experience and confidence level at the beginning of residency within the Internal Medicine discipline. For the duration of the residency, the resident will be encouraged to attend weekly house officer rounds on Internal Medicine topics deemed important by the mentors. These rounds should serve to enhance a broad understanding of internal medicine and highlight areas of importance for board preparation. Rounds are provided both for interns/residents (1 hour/week), as well as a more focused in-depth lecture series designed for preparing Internal Medicine residents for board examination (1.5 hours/week).
- 3. Dermatology Journal Club will be held weekly (1 hour) with at least one of the mentors throughout the entire residency. One to three articles will be reviewed during each session. Journal articles will be chosen by the resident with oversight provided by the mentors. Primary focus will be on reviewing Veterinary Dermatology (current issue as well as past five years) with additional articles chosen from the list of journals provided in the ACVD exam reference guide. Older, "classic" articles particularly in the arena of Structure and Function will also be evaluated throughout the course of the residency.
- 4. Basic science learning rounds will be held at least twice monthly (2 hours each session, total 4 hours) with either one or both mentors. Prior to these rounds sessions, directed readings will be assigned along with study guide questions to allow for better understanding of material. Textbooks on the ACVD exam reference guide will be included for review. Textbooks to be reviewed in their entirety include the most current editions of Muller and Kirk's Small Animal Dermatology, Skin Diseases of the Dog and Cat (Gross et al.),

and Basic Immunology (Abbas). Structure and function learning rounds will additionally cover pertinent sections of Bolognia's Dermatology. Other textbooks to be covered will include, but are not limited to, relevant sections from: Infectious Diseases of the Dog and Cat (Greene), Canine and Feline Endocrinology and Reproduction (Feldman), Equine Dermatology (Scott), Manual of Equine Dermatology (Pascoe), Textbook of Veterinary Internal Medicine (Ettinger), Large Animal Dermatology (Scott), Jubb Kennedy and Palmer's Pathology of Domestic Animals, and Veterinary Allergy (Noli).

- 5. Annually each spring the resident will attend the NAVDF forum and ACVD resident education forum. Funds are available to the resident for travel and registration costs.
- 6. The resident will additionally be required to attend weekly house officer seminars as part of the Intern-Resident Seminar Series (spring semester, 1 hour/week). The resident will be required to deliver a 45-50 minute presentation yearly as part of this series.
- 7. Subject to patient scheduling, the resident will have the opportunity to attend additional seminars, other than those outlined above at the VMTH. Additional seminars available but not required by the training program include morbidity and mortality rounds, medicine and/or oncology journal club, grand rounds, MRI rounds, and faculty seminars offered by various departments within the SVM.

#### Documentation

According to current requirements of the ACVD along with residency guidelines/responsibility of the VMTH, the following criteria will additionally be followed:

- 1. The resident will complete an ACVD Education Committee resident information sheet at the start of their program. The resident must also submit the Practice/Internship Equivalency form unless their internship was available through the American Association of Veterinary Clinicians internship/residency matching program.
- 2. Yearly progress reports will be required of the resident. This is the resident's responsibility and must be submitted to the ACVD Education Committee in a timely manner. The progress report must be completed each year and is to be typed/written on the ACVD Annual Residency Progress Report form. Additionally, the resident will maintain a complete log of all cases seen where they are the primary clinician. The case log must be typed, using the ACVD recommended template and must contain the patient identification number, signalment, diagnosis, and indication of follow-up. These case logs will not be required to be submitted to the ACVD Education Committee unless requested, however must be retained by both the resident and preceptors until the resident becomes a diplomate or for 5 years after completion of the residency (whichever comes first), in accordance with the ACVD Education Committee guidelines.

- 3. Both mentors will provide an annual personal evaluation of the candidate with the residency report as well as complete the ACVD Residency Benchmarks. During the last year of the program the mentor will include a statement that the resident has or will have met all the ACVD training requirements by the completion of the program. A certificate of completion of the residency will be presented to the resident upon successful completion of the 3-year dermatology residency program.
- 4. Additionally, the resident will receive clinical evaluations every two weeks (rotation evaluation) as part of Texas A&M small animal clinical science departmental guidelines.