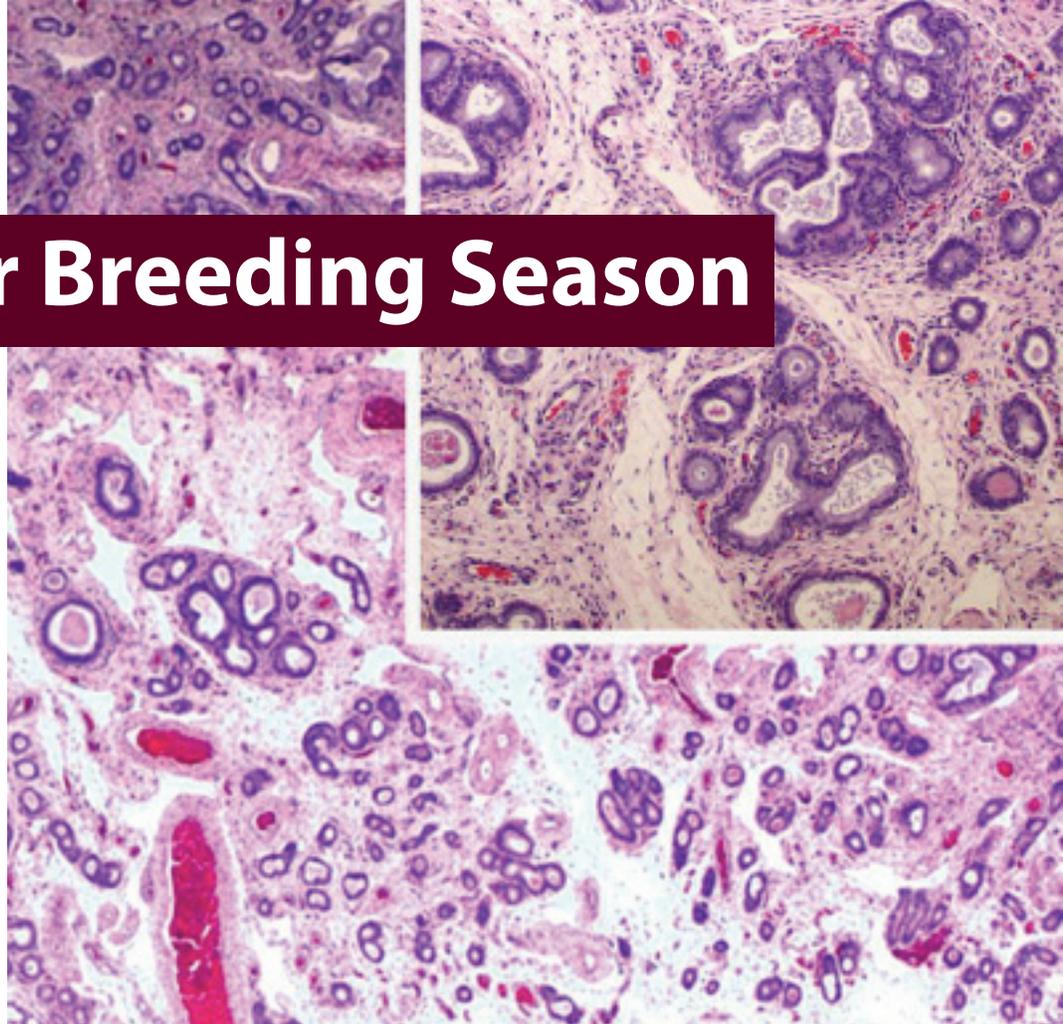


Prepare for Breeding Season

Take advantage of TVMDL's reproductive test offerings



- Online at tvmdl.tamu.edu
- Facebook: [facebook.com/tvmdl](https://www.facebook.com/tvmdl)
- Twitter: twitter.com/tvmdl



Photomicrograph of a mare's endometrium showing extensive glandular nesting and periglandular fibrosis (insert) characteristic of grade 3. Mares in this category have less than a 10% chance of conceiving and carrying a foal to term.*

With proper diagnostic testing to determine a mare's breeding soundness, practitioners and horse owners alike can protect their investment. Whether breeding a young mare for the first time or assessing an aging broodmare's ability to carry a foal, the Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) has tests to assist you this breeding season.

Endometrial biopsy

TEST: Uterine Biopsy, H&E Stain

SAMPLE: Ideally, two samples will be sent, one from each uterine horn. The preferred biopsy should be at least 2.4 centimeters in length and 0.4-0.5 centimeters in depth. Use a needle with the tip bent, not your fingers, to transfer the biopsy from the uterine biopsy forceps to 10% formalin. Although endometrial biopsies can be taken at any time during the estrous cycle, interpreting microscopic changes during winter anestrus is often unrewarding.

PRICE: \$45 for in-state clients; \$63 for out-of-state clients, per tissue

TURNAROUND: Run Monday through Saturday at both College Station and Amarillo labs; results are available 24 hours after the sample is received in the lab. *NOTE: biopsies are not read on Saturday though delivery is accepted.*

TVMDL has many expert pathologists, including Andres de la Concha-Bermejillo, DVM, MS, PhD, who will evaluate the biopsy to determine if the sample(s) show inflammation, glandular nesting or periglandular fibrosis. Then, the biopsy sample is graded on a scale of 1 to 3*.

- Grade 1 – This is the top score for biopsy evaluation; essentially normal or has microscopic changes that will not interfere with fertility; mares in this category have an >80% chance of conceiving and carrying a foal to term.
- Grade 2a – Mares in this category may have mild inflammation and/or fibrosis of the endometrium and have a 50-80% chance of conceiving and carrying a foal to term.
- Grade 2b – Mares in this category may have moderate inflammation and/or fibrosis of the endometrium and have between a 10-50% chance of conceiving and carrying a foal to term.
- Grade 3 – Mares in this category have extensive periglandular fibrosis (scar tissue) and are unlikely to carry to full term (less than 10%).

*(Journal of the American Veterinary Medical Association. 1982 Oct 1; 181(7): 680-1. Prognostic value of endometrial biopsy in the mare: a retrospective analysis. de la Concha-Bermejillo, A; Kennedy, PC.)

Endometrial culture

The Bacteriology Section isolates bacteria such as *Klebsiella*, *Salmonella*, *Streptococcus* and more from uterine swab samples.

TEST: Culture, Aerobic, Anaerobic

SAMPLE: Guarded swab; pure culture of bacterial isolate from submitted specimen. Uterine swabs should be taken before the endometrial biopsy to avoid contamination.

PRICE: \$23.00

TURNAROUND: Run on Monday through Saturday at both College Station and Amarillo; results in two days if no pathogens are found, but up to 7 days if the sample shows pathogenic growth.

A preliminary test report will be sent approximately 24 hours after receipt of the sample; the use of the MALDI-TOF mass spectrometer allows for rapid identification of organisms, if a pathogen is present. The test will report if the culture yields low, moderate or high growth.

NOTE: susceptibility testing (MIC or Kirby-Bauer Disk Diffusion) is performed in addition to culture on request. Per isolate, charge is \$12 for in-state clients, \$14.40 for out-of-state.

Uterine cytology

TEST: General Cytology

SAMPLE: The slide should be prepared at the time the sample is taken. Sending a swab without immediately preparing the slide renders it useless, as the swab will dry out. TVMDL will stain the slide.

PRICE: \$35.00

TURNAROUND: Run Monday through Friday at both College Station and Amarillo, with results within 24 hours after receipt.

Equine pregnancy

TEST: Progesterone (18 to 24 days post-breeding)

SAMPLE: 1 cc serum or plasma, removed from red blood cells. Harvest within 4 hours.

PRICE: \$15.00

TURNAROUND: Run Monday through Friday with results the same day.

TEST: Estrone Sulfate (after 60 days bred)

SAMPLE: 1 cc non-hemolyzed serum or EDTA plasma; animal must be greater than 60 days post-breeding.

PRICE: \$23.00

TURNAROUND: The College Station lab runs the test Tuesday and Friday with results same day if received by 5 pm the prior day.

Stallion Infertility

TEST: Semen Analysis (morphology and concentration)

SAMPLE: 1cc of fresh or frozen semen

PRICE: \$30.00

TURNAROUND: Run Monday through Friday in College Station with results the same day.

Cryptorchid

TEST: Testosterone (hCG response, performed at any age)

SAMPLE: Serum (pre- and 24-hour post-hCG)

PRICE: \$45.00

TURNAROUND: Run Monday through Friday in the College Station lab with results same day.

TEST: Estrone Sulfate (male, RIA)

SAMPLE: 1 cc non-hemolyzed serum or EDTA plasma. The animal should be greater than 3 years of age.

PRICE: \$23.00

TURNAROUND: Run Tuesday and Friday in College Station with results the same day if sample received by 5 pm the day prior.

TVMDL can run all of your breeding-related tests and provide expertly interpreted results. Please contact the lab if you have questions regarding proper slide preparation and we will be happy to assist you.

For more information on the test offerings available, visit tvmdl.tamu.edu.

About TVMDL:

The Texas A&M Veterinary Medical Diagnostic Laboratory protects animal and human health through diagnostics. An agency of the Texas A&M University System, TVMDL comprises two full-service laboratories, in College Station and Amarillo, and two poultry laboratories, in Center and Gonzales.

TVMDL is among 12 core laboratories in the National Animal Health Laboratory Network, a group of state and regional laboratories designed to provide a nationwide surge testing, response, and recovery capacity in the event of an animal disease outbreak.

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