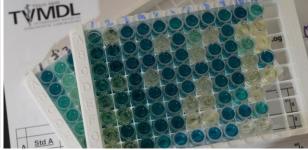


2018 TVMDL UPDATE









Dr. Jessie Monday
Bovine Veterinary Diagnostician
January 25, 2019



Amarillo Bacteriology & Serology Section Head

- Owais Khan, BVSc & AH, MVSc
- Diplomate American College of Veterinary Microbiologists
 - Specialties in virology, bacteriology, and mycology





New Microbiology Diagnostician in CS

- Melanie Landis, DVM, MBA
- Veterinary Diagnostician





New Endocrinologist in CS

- Jeremie Korchia, DVM, MS
- Diplomate of the American College of Veterinary Pathologists
 - Clinical Pathology
 - Endocrinologist





New College Station Lab Shipping Address

- Updated zip code
- Use the following address when shipping with an express courier:

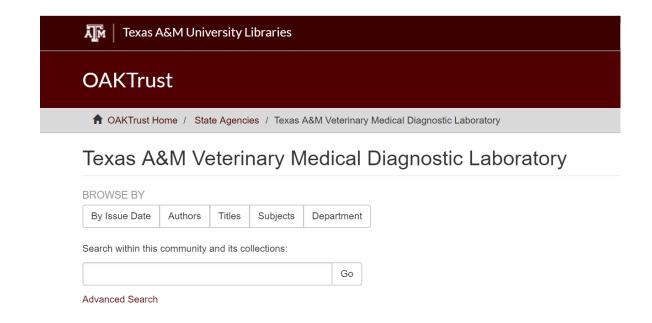
TVMDL 483 Agronomy Rd College Station, TX 77843-4471

Southeast Vocational Alliance (SVA) accounts were updated automatically



TVMDL Proceedings Open Access

- TVMDL Speakers
- BRD Conference
- Winter Meeting



http://oaktrust.library.tamu.edu/handle/1969.1/166441



Histopathology has gone digital!

- July 2018 TVMDL implemented digital slide scanning technology
- All tissue processing for histopathology done at College Station
- More efficient evaluation of histopathology submissions
- You can request specific pathologists at the Amarillo laboratory to read your slides
- To maximize efficiency:
 - Submissions of only fixed tissues should be sent directly to College Station
 - Submissions of fresh tissues, a mixture of fresh and fixed tissues, and necropsies should be sent to the Amarillo laboratory.



New Tests

- BRD
 - Bovine coronavirus rtPCR
 - Bovine Influenza virus D rtPCR
- Fecal Culture Tests
 - E. coli virulence genes rtPCR
 - Clostridium perfringens typing rtPCR
- Dairy
 - Salmonella Dublin ELISA
 - Mastitis PCR
 - Staphylococcus aureus, Streptococcus agalactiae, and Mycoplasma bovis



New Tests – Toxicology

- New profiles that test either tissue/feed or serum/whole blood/plasma
 - Trace Mineral Profiles
 - Heavy Metal Profiles
 - Comprehensive Profiles (trace minerals and heavy metals)
 - Individual mineral or metal testing available too



New Tests – Toxicology

- Serum/Blood Mineral Profile
- Serum/Blood Mineral Profile
- Serum/Blood Mineral Profile



Digital Toxicology Services

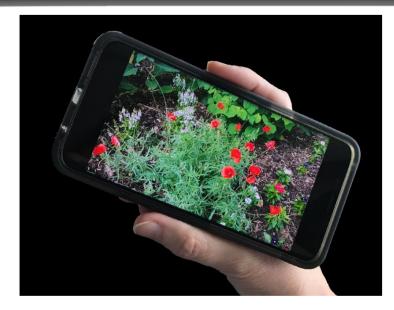
Subjects for identification or comment:

- Potential toxic plants
- Potential toxic mushrooms
- Potential blister beetles
- Potential blue-green algae (will require a microscopic image. Image can be taken on a smart phone over eye-piece of microscope)
- Material observed in pet ingesta, unknown baits





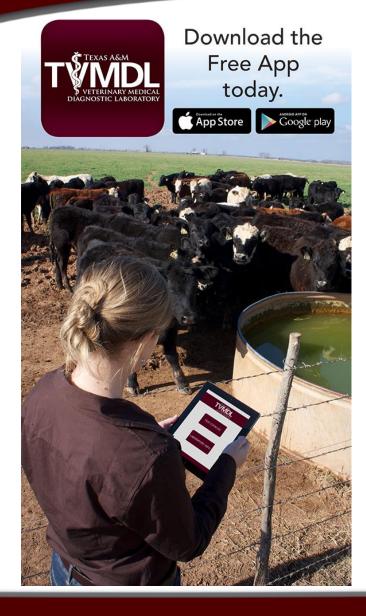






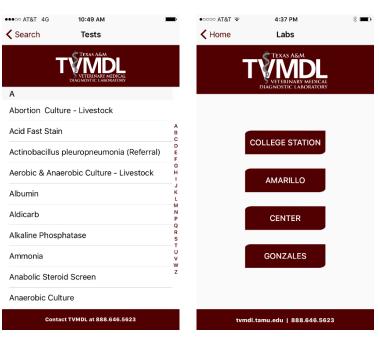


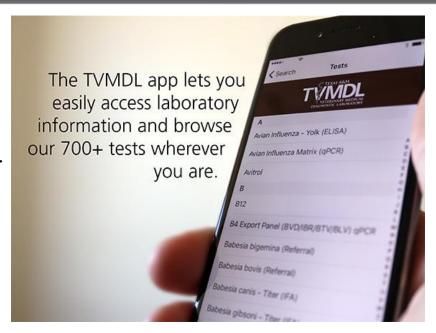
digitaltoxicology@tvmdl.tamu.edu



Test information includes:

- A detailed description of the test.
- Specimens needed for testing.
- How to package and ship specimens safely.
- Pricing information.
- Test schedules and expected turnaround times.





Laboratory information includes:

- Link to driving directions to all four locations.
- TVMDL contact information.
- Billing and physical addresses for sending specimens.
- Hours of operation.



WANT CYTOLOGY RESULTS WITHIN AN HOUR?



Now you can, by using your smart phone

Here's How

1.



Capture slide images with any smart phone, camera eye piece adapters, or built-in microscope cameras.

2.



Submit microscopic images to: digitalcytology@tvmdl.tamu.edu

2



Receive a cytologic interpretation within an hour.



Includes rapid image interpretation, and full cytologic evaluation of glass slides.





TVMDL App Updates

- Digital Cytology submission
- Digital Toxicology submission



TEST CATALOG

LABORATORY INFO

DIGITAL CYTOLOGY

DIGITAL TOXICOLOGY



Electronic Reporting of EIA, Trich, & Piro

- The information reported is the same
- Turnaround time is decreased
- Can easily send the information via email
- Results can be sent directly to the owner at the same time as the veterinarian if the submitter provides the owner's email
- Reports can be validated via a QR code with any smartphone



Electronic Reporting of EIA, Trich, & Piro



http://tvmdl.tamu.edu/wp-content/uploads/2019/01/L.038 1218.pdf



Updated Trich Testing Regulations 6.15.18

- All samples for PCR must arrive at TVMDL within 96 hours (4 days) of collection
 - Arrival within 48 hours is highly recommended
- Samples submitted in the Inpouch for culture must arrive at TVMDL within 48 hours of collection
- Inpouch TF samples will not be run if the expiration date is before the day the test is set up
- Field pooling is not allowed
- Official animal ID must be recorded on the Trich form
- Samples that do not meet these guidelines will not be tested



Tritrichomonas Foetus – Bovine (qPCR)

Detection of Tritrichomonas foetus in bovine samples by qPCR.

Direct qPCR Submission Guidelines

Price

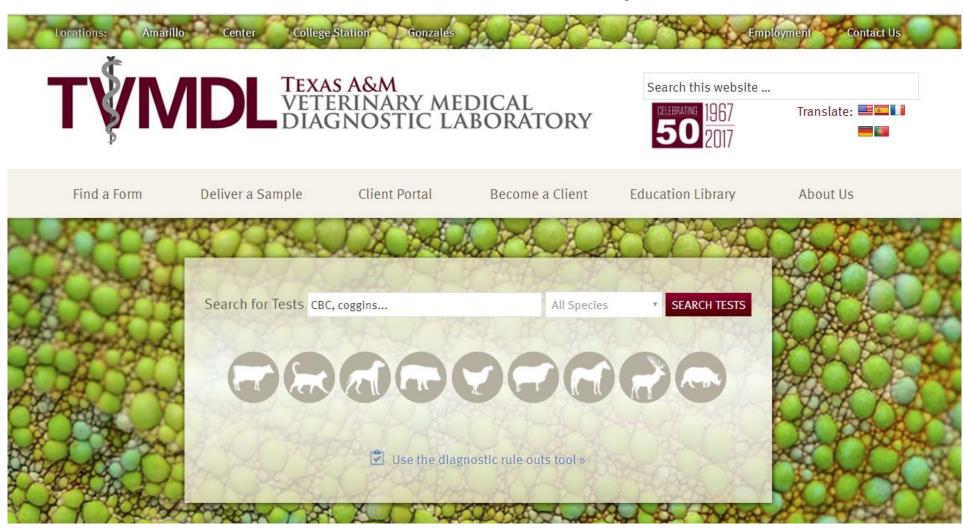
\$25.00

FAQ: Molecular Diagnostics Result Interpretation

| Name | Tritrichomonas Foetus – Bovine (qPCR) | | |
|-----------------------|---|--|--|
| Section | Molecular Diagnostics | | |
| Species | Bovine | | |
| Specimen | InPouch Trich samples or direct smegma in PBS (phophate buffered saline) | | |
| Sampling Requirements | ts 1-2 mL preputial washes from bulls, cervical washes from cows, inoculated trich pouch, or stomach content of aborted fetus. Samples for direct smegma PCR should be placed in a test tube with 1.5 mL of PBS. | | |
| Collection Container | Trich pouch, leak proof plastic container, plastic or glass tube | | |
| Packing Instructions | InPouch: Label all samples. Maintain and ship samples overnight at room temperature. Protect from extreme heat and cold. Direct Smegma qPCR: Label all samples. Maintain at refrigerator temperature and ship overnight n cold packs. Protect from extreme heat and cold. | | |
| Special Instructions | POOLING SAMPLES Up to 5 properly collected and handled samples may be pooled for testing. Samples must be collected and shipped individually to TVMDL. For Texas Animal Health Commission's regulatory testing requirements, up to 5 samples may be pooled and pooling must be completed at TVMDL TVMDL pools samples for \$1 per pouch, allowing the client to test five samples for the price of one. Pricing example: 5 samples submitted and pooling requested would be charged \$25 testing fee + \$5 pooling for a total of \$30 plus accession fee. If a pooled sample results in a positive test, TVMDL will identify the positive animal(s) by testing the individual samples in the pool at the regular price of \$25 per test. Without the individual tests, all bulls in a positive pool are required by the State to go to slaughter. Pooling is not available for samples using the Direct smegma qPCR method. Direct smegma qPCR is only performed at the College Station laboratory. | | |



TVMDL Website Updates





Updated test catalog

- Named by pathogen
- (Testing method)
- [Referral]
- New search aliases





Find a Form Deliver a Sample Client Portal Become a Client Resources About Us

Search for Tests CBC, coggins... All Species SEARCH TESTS

Results 1-25 of 286 for "" in bovine.

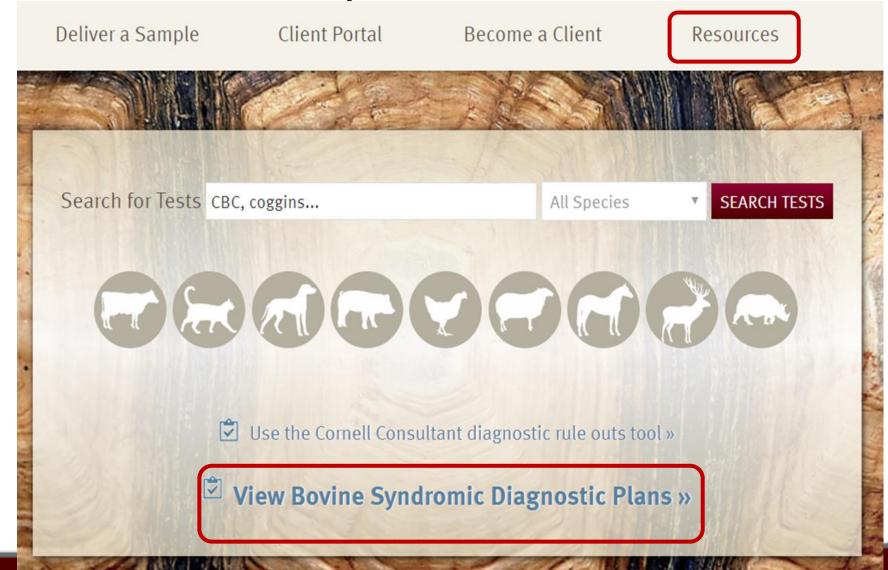
An accession fee of \$7.00 is applied to each accession/case, not each specimen. Turnaround times are estimates in business days and apply to individual tests. Actual reporting of test results depends on the full battery of tests requested, day of the week/time of day samples arrive at the testing laboratory, and the quantity/quality of samples submitted.

The tests and fee schedules are provided for use by TVMDL clients, including veterinarians and animal owners. Fees charged to animal owners by veterinarians may exceed test prices shown herein, reflecting the time, expertise, and expense necessary to collect the sample, ship it in an appropriate manner, interpret results, and provide treatment advice.

| Name ↑ | Description | Species | Price | |
|--|--|---------------|---------|---------|
| E. coli toxin typing – Ruminant (rtPCR | Tests for E. coli toxin and virulence genes commonly associated with | Bovine, | \$45.00 | Details |
| | pathogenic strains of E. coli: F5/K99 fimbrial adhesins, STa enterotoxin, LT | Camelid, | | |
| | enterotoxin, cs31a adhesins, CNF1 and CNF2 cytotoxic necrotizing factors, | Caprine, | | |
| | Stx1and Stx2 Shiga like toxins, and eaeA intimin in E. coli isolates by real-time | Cervid, Ovine | | |
| | PCR (rtPCR). FAQ: Molecular Diagnostics Result Interpretation | | | |
| | Specimen: Bacterial isolates of E. coli | | | |
| Bovine coronavirus (rtPCR) | This PCR is validated to test fecal samples, intestinal contents, | Bovine | \$25.00 | Details |
| | gastrointestinal tissues and bovine respiratory samples including | | | |
| | nasopharyngeal swabs, and respiratory tissues. | | | |
| | Specimen: Nasopharyngeal swabs, 1-2 ml transtracheal wash, 1-2 ml bronchoalveolar lavage, respiratory tissues such as 1.0 g of fresh or frozen lung or trachea, 1.0 g of fresh feces in clean container, intestinal contents, or gastrointestinal tissues. | | | |
| Bovine Coronavirus (IFA Titration) | Bovine Coronavirus IFA Titration performed at Purdue University. | Bovine | \$5.00 | Details |



Bovine Syndromic Plans











Translate:



Find a Form

Deliver a Sample

Client Portal

Become a Client

Resources

About Us

Search for Tests CBC, coggins...

All Species

Bovine Syndromic Diagnostic Plans

TVMDL has compiled syndrome specific diagnostic plans to assist clients in efficient diagnostic testing strategies based on clinical signs or gross necropsy findings. The client still has the ability to select the tests within the diagnostic plans that fit with the diagnostic goals and pre-test clinical suspicion of each case. Simply select the syndrome most appropriate for the case and then indicate which tests are desired on the submission form.

Click below to view each plan:

Bovine Respiratory Disease (BRD) Diagnostic Plan

Bovine Sudden Death Diagnostic Plan

Bovine Abortion Diagnostic Plan

Bovine Neurological (CNS) Disease Diagnostic Plan

Bovine Calf Diarrhea Diagnostic Plan

Bovine Pinkeye (IBK) Diagnostic Plan

Bovine Adult Diarrhea/Weight Loss Diagnostic Plan

Bovine Biosecurity Diagnostic Plan



Case Studies



Melanocytic Tumors in Cattle



Cattle Nutritional Decline in the Winter



Bone Sarcoma Found in Canine Rib Mass

MORE CASE STUDIES...



Species Specific Newsletters

- Quarterly
- Information
- Case Studies
- Handouts
- Species Specific
 - Equine
 - Bovine
 - Small livestock
 - Companion Animal
 - Avian
 - Exotic

TVMDL Quarterly Wrap Up

Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) just wrapped up an exciting 2018! Our species specific quarterly newsletters will serve as a way to update clients on new tests, case studies, handouts, and other resources that have been created or updated over the course of each quarter. As always, feel free to visit our website, tvmdl.tamu.edu or call one of our laboratories for more information.

Case Studies

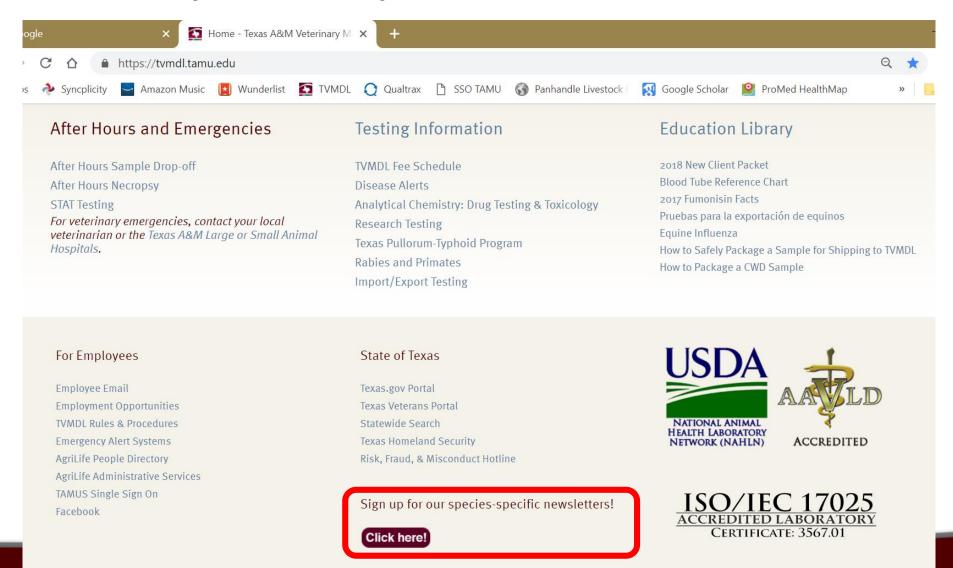
Each week, TVMDL publishes case studies to our website and social media pages. These brief write ups summarize only a few of the hundreds of cases TVMDL handles each day. View these case studies and more in our <u>Case</u> Study Library.

Piccione featured in The Remuda publication

Handouts



Species specific newsletters





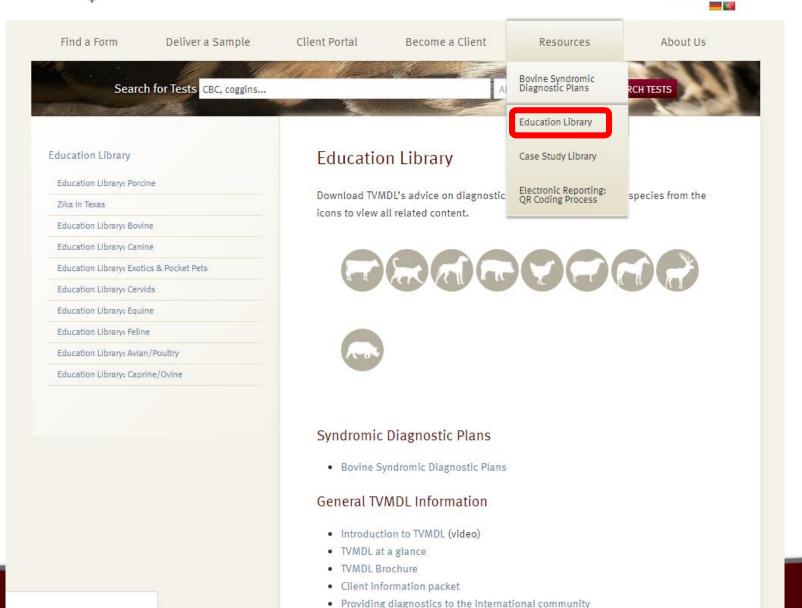
TVMDL on Facebook



tions: Amarillo Center College Station Gonzales Employment Contact Us









Fee Schedule

After Hours and Emergencies

After Hours Sample Drop-off

After Hours Necropsy

STAT Testing

For veterinary emergencies, contact your local veterinarian or the Texas A&M Large or Small Animal Hospitals.

Testing Information

TVMDL Fee Schedule

Disease Alerts

Analytical Chemistry: Drug Testing & Toxicology

Research Testing

Texas Pullorum-Typhoid Program

Rabies and Primates

Import/Export Testing

Education Library

2018 New Client Packet

Blood Tube Reference Chart

2017 Fumonisin Facts

Pruebas para la exportación de equinos

Equine Influenza

How to Safely Package a Sample for Shipping to TVMDL

How to Package a CWD Sample

For Employees

Employee Email

Employment Opportunities

TVMDL Rules & Procedures

Emergency Alert Systems

AgriLife People Directory

AgriLife Administrative Services

TAMUS Single Sign On

Facebook

State of Texas

Texas.gov Portal

Texas Veterans Portal

Statewide Search

Texas Homeland Security

Risk, Fraud, & Misconduct Hotline

Sign up for our species-specific newsletters!







ISO/IEC 17025
ACCREDITED LABORATORY
CERTIFICATE: 3567.01



Accession Fee

\$7.00 for all clients per accession.

Accession fees apply to each accession/case, not each specimen. An accession is defined samples from the same animal/herd/flock, submitted for the same condition, collected at the same time. This allows clients to receive bulk testing of same species (from the same owner) under one accession. Poultry submissions requesting multiples tests (e.g., AI, Mg/Ms, culture, etc.) for a single flock are counted as one accession.

| | | Search: | | |
|------------------------|---------------------------------------|--|-----------------------------|----------|
| Category ÷ | Fee Name ÷ | Fee Description \$ | Laboratory + Location | Fee ÷ |
| Additional Services | Inoculation Fee | Fee to inoculate feline trich pouch. | A, CS | \$7.00 |
| Additional Services | Consultation/Interpretation | Fee for toxicology staff to offer interpretation of water samples from the TAMU water lab. | CS | \$5.00 |
| Additional Services | Pooling Fee - \$1 | Fee to charge for pooling samples. Fee is applied for each additional sample after the first. To be used for trich pooling. | A, CS | \$1.00 |
| Additional Services | Special Dilution | Fee to perform a serology test at a special dilution. | A, CS | \$12.00 |
| Additional Services | Decalcification | Fee to decalcify hard tissues for histopathology. | CS | \$10.00 |
| Additional Services | Endpoint Titer | Fee to determine an endpoint titer on a sample previously tested. | A, CS | \$12.00 |
| Additional Services | NPIP Audit and Training | Fee charged for performing NPIP audit and/or training for NPIP sample collection. | CS | \$200.00 |
| Additional Services | Field Trip - 100+ miles round trip | Fee for TVMDL professional to visit farm/ranch/pasture for diagnostic investigation. Field trip is equal to / greater than 100 miles round trip. | ALL | \$100.00 |



TVMDL 2019 Projects

- Continue test selection and interpretation resource development
- Syndromic plans for other species
- New client portal
 - More interactive
 - Digital submissions
 - View test statuses and access reports
- New custom information management system
 - Updated workflow and QA efficiency
 - Reformatted reports
- Construction of new laboratory building in Canyon





Canyon Laboratory

- 11,233 square feet
- Full service
- WTAMU Campus
- 2020 Completion







Protecting Animal and Human Health through Diagnostics





Questions and Suggestions

- Contact a TVMDL Veterinary Diagnostician
 - College Station: 888-646-5623 or 979-845-3414
 - Amarillo: 888-646-5624 or 806-353-7478
- Write request for diagnostician to call you on submission form
- Or email any questions or suggestions to

jessie.monday@tvmdl.tamu.edu

thensley@tvmdl.tamu.edu