NDAES Veterinary Diagnostic Laboratory

Mission: To provide reliable veterinary medical testing and diagnostic support services to veterinarians, producers, animal owners and the public health sector.

Overview: The full-service laboratory is accredited for all species by the American Association of Veterinary Laboratory Diagnosticians (ISO 17025 equivalent) through 2023. It is a level II USDA National Animal Health Laboratory Network Laboratory, a member laboratory of FDA's Veterinary Laboratory Investigation and Response Network. The laboratory is also CLIA certified to perform high complexity testing for SARS-COV2 in humans and is the only laboratory in the state providing rabies testing.

Staffing: 4 board certified veterinary specialists (DVM with PhD), 1 DVM resident, 1 PhD level scientist, 5 certified medical laboratory scientists (BS, MS), 11 AS, BS, MS level technical staff, 1 BS level part-time technical staff

Laboratory testing information (2020):

Cases submitted: 12,856

Total tests: 131,609 **(<u>10 % increase from 2018</u>)**

- 1,400 Necropsies/Cause of death investigations
- 2,704 Toxicology submissions
- 37,816 Molecular Diagnostics tests
- 7,430 Bacterial cultures
- 1,351 Antibiotic sensitivity panels

Opportunities: The laboratory produces a tremendous amount of field derived, valuable data from performing over 131,000 tests and examinations but lacks a **<u>veterinary epidemiologist</u>** to analyze, interpret and disseminate evidence-based information to animal producers and the public.

Examples of data:

- Antibiotic resistance patterns and effectiveness of therapy
- Changes in incidence of diseases or specific disease agents
- Newly emerging diseases
- Changes in water quality
- Changes in fungal toxin type or quantity in feed
- Nutritional deficiencies

Value: Laboratory based programs to disseminate information and recommendations, relevant to specific areas of the state, will help veterinarians, producers, and animal owners to make evidence-based decisions regarding management practices to improve productivity and positively impact animal and human health in ND.

Contact: Brett T. Webb, DVM, PhD, Director - brett.webb@ndsu.edu - (701) 231-5271

November 2, 2021