

NC Veterinary Diagnostic Laboratory System (NCVDLS) – Staffing and Resource Needs

Background/Issue

The NCVDLS consists of 4 laboratories across the State

- Rollins Laboratory (Steve Troxler Agricultural Sciences Center, Raleigh, NC)
- Griffin Laboratory (Monroe, NC)
- Northwestern Laboratory (Elkin, NC)
- Western Laboratory (Arden, NC)

The Rollins Lab in Raleigh, NC is the central lab and is the only lab with capabilities for molecular diagnostics, virus isolation, bacteriology, and histopathology. This briefing will focus on the staffing and resources needs for this location.

The Rollins Lab moved into its current location at the Steve Troxler Agricultural Sciences Center in 2021. This move provided ample space with the hope of adding more staff to expand diagnostic capabilities and to provide our animal agriculture industry with the testing they need.

In the past 12 years, the lab's PCR testing case load has increased by more than 525%. With the ongoing threat of infectious diseases in the poultry industry (ILT, MS/MG, and AI), the diagnostic and surveillance case load will continue to increase. The progressive and sustained increase in testing numbers have maxed out our testing capacity and limits our ability for outbreak testing capacity and eliminates our ability to increase or add testing to meet the testing demands of our stakeholders. While our case load has increased, the number of staff has not, as we currently have 5 staff in molecular diagnostics performing PCR testing. Each staff member is performing close to 13,000 tests/year.

With our lab at capacity, industry has informed us that they are only sending regulatory tests to the Rollins lab while sending all other testing needs out of state. For example, Avian Metapneumovirus spread across the country this past year causing significant disease in poultry. This disease presents with signs similar to other respiratory diseases. However, due to our testing capabilities, we have been unable to develop and implement testing for this important infectious disease in poultry causing industry to seek testing elsewhere. Additional surveillance and diagnostic testing requirements that cannot be met here are sent to Georgia, Mississippi, Minnesota, Iowa, Wisconsin, New York, and South Dakota diagnostic laboratories.

Additional staffing will enable us to increase our testing capabilities for poultry, swine, and other livestock, companion animals, and wildlife, and provide surge capacity during outbreaks. Though our swine industry ranks number 3 nationally, testing for this industry accounts for less than 1% of our testing case load.

Staffing Needs – Current Budget Ask
5 FTEs = \$664,905

Position	Summary of Duties	Justification	Salary Requirements
Medical Laboratory Technologist II	Technologist – PCR	Support of the poultry and swine industry with significantly increased test load.	\$112,558
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Medical Laboratory Technologist I	Histo/IHC Processing	Processing samples and making H&E slides for evaluation by pathologists. With appropriate marketing and increased service, CWD submissions can significantly increase.	\$100,581
Veterinary Specialist-Pathologist	Veterinary Pathologist Support	AAVLD requires that subject matter experts, pathologists, are directly involved with all necropsy test selection, oversight, and case coordination. Our lab system has historically been set up to allow veterinary diagnosticians for this role. This is not AAVLD compliant, and we need additional pathology support to address recent audit findings.	\$169,604
Veterinary Specialist-Molecular, Virology, Sequencing Section Head	Admin/Molecular/Virology	Our last AAVLD audit illustrated a significant need for mid-level management with lab assistant director continuing to serve as molecular section head. Oversight of current caseload, personnel management, QA as well as short and long range planning.	\$169,604
		Total:	\$664,905

These 5 FTEs will help with capacity issues for poultry and outbreak testing, CWD testing, and will address recent AAVLD audit findings. AAVLD is the American Association of Veterinary Laboratory Diagnosticians and provides accreditation to our laboratory. The two Medical Laboratory Technologist II positions will allow us to increase our testing capacity by 40%. The Medical Laboratory Technologist I position will perform CWD IHC testing.

Minimum education and experience for the Medical Laboratory Technologist I position: Bachelor's degree in medical technology, chemistry, or a biological science from an appropriately accredited institution; or Associate degree in medical technology from an appropriately accredited institution and two years of experience in a medical laboratory; or Completion of a Certified Laboratory Assistant course in medical technology or a comparable course and three years of experience in a medical laboratory; or an equivalent combination of education and experience.

Minimum education and experience for the Medical Laboratory Technologist II position: Bachelor's degree in medical laboratory technology, chemistry or a biological science from an appropriately accredited institution and two years of experience in a medical laboratory in the assigned area; or Associate's degree in medical technology from an appropriately accredited institution and three years of medical laboratory experience; or Completion of a certified laboratory assistant course in medical technology or a comparable course from an appropriately accredited institution and four years of medical laboratory experience; or an equivalent combination of education and experience.

Staffing Needs – Expansion of Services

13 FTEs = \$1,516,942

Position	Summary of Duties	Justification	Salary Requirements
Veterinary Clinical Pathologist	Clinical Pathologist	Special training in the interpretation and performance of utilizing clinical pathology results and tests in support of the new testing section not currently offered by our lab. Clinical pathology testing will help recruit a larger client pool and better support our stakeholders.	\$169,604
Medical Laboratory Technologist I	Technologist for Clin Path	Technical support for the clinical pathology lab.	\$100,581
Medical Laboratory Technologist II	Technologist for Clin Path	Technical support for the clinical pathology lab.	\$112,558
Veterinarian	Client Services Coordinator	Assists the receiving staff. Processes need oversight of samples and supervision of staff to assure accuracy and timeliness of sample delivery for testing and follow up with clients. Acts as a client liaison to assist in proper sample collection, submission, and testing based on disease outbreak.	\$147,783
Processing Assistant V (Admin Specialist I)	Receiving, purchasing, accounts receivable/payable	Administration needs a dedicated backup position for these critical areas of laboratory function	\$66,480
Medical Laboratory Technologist I	Histo/IHC Processing	Processing samples and making H&E slides for evaluation by pathologists. Currently our department operates at capacity. With appropriate marketing and increased service, CWD submissions can significantly increase.	\$100,581

Medical Laboratory Technologist II	Technologist-PCR	Support of the poultry and swine industry with significantly increased test load.	\$112,558
Medical Laboratory Technologist I (Virology)	Technologist	Additional testing load will require additional techs – in support of poultry and swine industry.	\$100,581
Medical Laboratory Technologist II	Technologist/Sequencer	Technical support of the sequencing technology that we don't currently offer. State of the art technology that the poultry and swine industries rely on when viral and bacterial pathogens are isolated.	\$112,558
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Veterinary Specialist	Oversight and management of our necropsy and histopathology staff and case-load	Our last AAVLD audit illustrated a significant need for midlevel management with lab director continuing to serve as pathology services coordinator and pathologist as caseload requires.	\$169,604
IT System Analyst	Support IT Needs	Result messaging is a requirement of NAHLN testing and continues to get more complicated and diverse.	\$120,162
Lab Manager	Oversight and management of safety needs.	Our laboratory system involves biohazards within 4 necropsy suites and multiple testing (receiving, bacti, virology, molecular) sections.	\$91,334
		Total:	\$1,516,942

These 13 positions include 3 that were lost to staff the ASC as well as other positions that would set the lab up to offer additional services to our stakeholders.

All 18 positions combined total \$2,181,847.

Additional Information – Resources

In our current budget ask, we include a \$491,770 request for testing supplies and maintenance requirements. This makes our current budget ask just over \$1.1 million. If we add additional staffing outside of the 5, we would need to increase our request for supplies as additional testing would require additional supplies.