When sending submissions to the lab, it is always important to include appropriate paperwork. This allows the lab technicians to efficiently process your cases to get you timely results.

This is especially true for Web IDs. These unique numerical identifiers allow for seamless transition of information from the Client Web Portal into our internal LIMS system. They are easy to generate and submit online via our Web Portal. However, when identifying the samples that will be traveling to the lab it can be harder to get them properly labeled. It is important to have these samples appropriately identified so that they may be properly match with the paperwork upon arrival at the lab. The more clear the information, the better, as we receive many similar samples on any given day. We recommend the following 2 options for identifying your samples:

**OPTION 1**
Include the printed submission form along with the samples

**OPTION 2**
Include the Web ID, Submitter Name, and Site Name on the container of the samples
New Avian Molecular Diagnostics in ISU VDL

Iowa is the largest producer of table eggs, a top producer in turkey production and has a significant broiler production. While ISU VDL has long provided the poultry industry with diagnostic services, there was a need for expanding the diagnostic capabilities offered to our poultry clients. These tests will allow ISU VDL diagnostics and all other veterinarians to arrive at more informed diagnosis of poultry diseases.

### New Avian Molecular Diagnostics in ISU VDL (cont.)

**AVIAN MYCOPLASMA**

- **Mycoplasma gallicolum (MG):**
  - MG qPCR: targeting 16S rRNA gene to detect as little as 100 MG bacterial cells in sampled tissues. Preferred samples are respiratory swabs (chonial, tracheal, lung or air sac swabs). Swabs can be pooled in BHI media or PBS.

- **Mycoplasma synoviae (MS):**
  - MS qPCR: targeting the 16S rRNA gene to detect as little as 100 MS bacterial cells in sampled tissues. Preferred samples are respiratory swabs (chonial, tracheal, lung, air sac or joint swabs). Swabs can be pooled in BHI media or PBS.

- **Mycoplasma meleagridis (MM):**
  - MM qPCR: targeting the 16S rRNA gene to detect as little as 100 MM bacterial cells in sampled tissues. Preferred samples are respiratory swabs (chonial, tracheal, lung or air sac swabs). Swabs can be pooled in BHI media or PBS.

### RESPIRATORY BACTERIA

**Orohnobacterium rhinotracheale (ORT):**

- ORT qPCR: targeting 16S rRNA gene to detect as little as 100 ORT bacterial cells in sampled tissues. Preferred samples are respiratory swabs (tracheal, lung or air sac swabs). Swabs can be pooled in BHI media or PBS.

**Bordetella avium (Bav):**

- Bav qPCR: targeting two genes, this newly developed rt-PCR in our laboratory (under publication) can detect as little as 100 Bav bacterial cells in sampled tissues. Preferred samples are respiratory swabs (tracheal, lung or air sac swabs). Swabs can be pooled in BHI media or PBS.

**Mycoplasma meleagridis (MM):**

- MM qPCR: targeting the 16S rRNA gene to detect as little as 100 MM bacterial cells in sampled tissues. Preferred samples are respiratory swabs (chonial, tracheal, lung or air sac swabs). Swabs can be pooled in BHI media or PBS.

### OTHER VIRAL DISEASES

**Reo Virus:**

- Reo qPCR: targeting the conserved Reo virus gene to detect as little as 100 of both Chicken and Turkey Reo viral particles in sampled tissues. Preferred samples are gastrocennous and digital flexor tendons of affected legs of chickens or turkeys.

Arriving at a confirmed diagnosis is no easy task for veterinary cases in any Veterinary species and that includes poultry cases. The purpose of establishing so many new diagnostic tests is to help clinicians, poultry production veterinarians, and poultry diagnosticists in the VDL, and elsewhere to arrive at more informed conclusions for their cases. The above-mentioned tests are designed to run individually; however, they can be run in conjunction with each other to address long lists of differential diagnosis.

We are currently working on additional molecular diagnostic testing (Pasteurella multocida (PV Cholera), Avian Leukosis Virus (ALV)), which will be critical for the future cases and disease investigations.

**Upcoming University Holidays:**

- **Thanksgiving:** Thursday, November 28th
- **Friday, November 29th**
- **Christmas** Tuesday, December 24th
- **Wednesday, December 25th**

**HATS will be closed on Thanksgiving Day, but will receiving drop-offs until 3pm on Friday, November 29th for PRRS and PED/PPC/HTGE testing.**

**HATS will be closed on Christmas Day, but will be receiving drop-offs until 3pm on Tuesday, December 24th for PRRS and PED/PPC/HTGE testing.**

**Questions?**

Please contact ISU VDL Client Services
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