**Points of Interest**

- NH Moose Study
- Holiday Poisons & Pets
- APHIS / Veterinary Services Reorganization
- Canine Circovirus

**Pathology Staff**

- Inga Sidor, MS, DVM, DACVP
  Clinical Assistant Professor
  Sr. Veterinary Pathologist
- Michelle Fleetwood, DVM, DACVP
  Clinical Assistant Professor
  Sr. Veterinary Pathologist
- Roger Wells, DVM, DACVP
  Sr. Veterinary Pathologist
  Clinical Professor – Emeritus

**Contact Us**

- Robert Gibson, BS, MPH
  Managing Director

NH Veterinary Diagnostic Lab
129 Main Street
Kendall Hall, Room 319
Durham, NH 03824
603-862-2726
603-862-0179 fax
www.nhvdl.unh.edu

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**Bowenoid in situ carcinoma**

Lisa Hindson, DVM (Adirondack Animal Hospital, NY)
Michelle Fleetwood, DVM, DACVP (NHVDL, NH)

“Jenny” was a 17-year-old spayed female domestic shorthair that presented for very slow spreading crusting lesions of two year duration on the temporal area, lateral neck and digits. Some serous discharge and pruritus were noted. Lesions were non-responsive to topical steroids and antibiotics. Biopsies were submitted from the temporal region and neck. Microscopically, there were multifocal plaque-like thickenings involving the epidermis and occasionally the follicular epithelium. These plaques displayed full-thickness disruption of normal epithelial stratification and nuclear polarity. There are also mitoses and scattered keratinization in all layers of the epithelium. Some of the plaques are pigmented and covered by a serocellular crust or hyperkeratosis. Bowenoid in situ carcinoma (BISC) was diagnosed. Jenny was euthanized four months later.

BISC (also known as Bowen’s disease or multicentric squamous cell carcinoma in situ) is uncommon in cats. Lesions are usually multifocal, crusted plaques and verrucous lesions that are often painful and affect older cats. Unlike most cases of squamous cell carcinoma in cats, BISC is not associated with UV light and can affect any area, including well-haired pigmented areas of skin.

In the majority of cases the lesion is limited to the epidermis (in situ carcinoma), but a small proportion of cases invade the dermis and progress to invasive squamous cell carcinoma. Metastasis has not been reported. About half of the cases are associated with papillomavirus, and it has been proposed that some cases arise from feline viral plaques.

Treatment usually involves surgical excision or laser ablation. Topical imiquimod has recently been used. The prognosis for a cure is still guarded since new lesions may continue to develop.

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**Director’s Corner**

It was great to see and visit with many of our clients at the NHVMA fall continuing education meeting on November 6. Our participation provides us an opportunity to promote the lab’s services and to ensure the diagnostic needs of our current clients are being met. We will be there again in April for the Spring meeting!

Our mail-in zoo and aquarium necropsies have more than doubled from last year and continue to rise. This has really become a specialty niche for the lab and our pathologists all have an interest and extensive experience with exotic cases.

Growth continues in our other lab sections as well. The microbiology lab has seen a 6% increase in submissions from last year. Better utilization of our laboratory information management system (LIMS) has resulted in an improved and faster method of reporting microbiology results.

In just a few weeks our newly hired pathologist, Dr. Shannon Martinson, will start. Dr. Martinson comes to us from the Atlantic Veterinary College where she worked as a board certified pathologist and graduate faculty member. We are eager to welcome her and look forward to the expertise she brings. Our next newsletter will provide you with a full introduction to this newest member of our team.

The NH Farm Bureau held their annual meeting here at UNH on November 8 and 9. The first day culminated with an awards banquet featuring food entirely sourced from local producers. It was great to see so many members, of all ages, recognized for their achievements and contributions to NH agriculture. The NHFB and its members have been very supportive of the lab and the livestock diagnostic services we provide. We appreciate all their efforts to strengthen NH agriculture.

Wishing you a joyous holiday season and looking forward to working with you in the new year.
There were three cases of Eastern Equine Encephalitis (EEE) in NH horses this year. Some statistical data for veterinary cases of EEE is included here. For additional information regarding all EEE cases in NH, geographic distribution and mosquito surveillance, detailed maps and reports are available through the Lab Receives $50K Gift from Zock Foundation

The Lab recently received a generous gift of $50,000 from the Zock Endowment Trust. We are very grateful to the Zock Endowment Trust for this gift and have already begun putting it to good use.

The first item purchased was a much needed replacement for our automatic tissue processor in the histology lab. With over 7,000 pathology cases completed annually, this is a very critical piece of equipment for our laboratory.

Since Surveillance in NH indicates viruses may be present in mosquitoes from mid July until a hard frost in late October, owners should contact their veterinarians to make sure their horses are on an appropriate vaccination schedule.

Additionally, to see NH in comparison with other states, the USGS has excellent interactive maps on their website. Click on the state you want and select veterinary cases. You can see the data for other viral encephalitis cases as well.

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NH House Bill 547

The commission formed by the NH legislature in response to HB547 has submitted the final report on their findings. This house bill charged the commission with the task of studying improved and permanent options for funding the NHVDL and providing these findings along with any recommendations. A variety of ideas based around fees and licensing related to animals were suggested. Additional discussions will be ongoing and legislators will ultimately decide which options would be most beneficial and worthy of sponsorship.

Canine Brucellosis Testing

We are pleased to report that Zoetis is now producing the Canine D-Tec Brucellosis Antibody Test kit and our lab is offering this test to our clients once again.

Serum is the required specimen for this rapid slide agglutination test and results can be expected the same day.

“Ozzie” is Dr. Michelle Fleetwood’s 5-year old Bernese Mountain Dog.

### Eastern Equine Encephalitis

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### A New Campus Home for the NHVDL

After four months of weekly meetings with architects, engineers and campus planners, construction will begin soon on what will become the laboratory's future home.

After 43 years in its original location, the NHVDL will be moving around the corner this Spring to a renovated facility that will provide the lab with numerous improvements to its infrastructure. With the financial support of the University, and additional funds garnered through Senator Jim Rausch and the NH legislature, this new facility and location will provide more conveniences for clients along with improved services, efficiency, biosecurity and safety. Stay tuned to updates on the progress in future newsletters.

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### Holiday Schedule

Please note UPS and Fed Ex holiday schedules and delivery dates prior to shipping. If you have time sensitive testing needs, please call us in advance.

In spite of the shortened week, we plan to process samples and issue reports with minimal delays.

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www.facebook.com/NHVDL

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