3 Viruses That are Interesting to me:

- West Nile Virus
- Acute Laminitis
- Hyperkalemic Periodic Paralysis (HYPP)

Disease Prevention:

- Viral Disease Prevention
- Functional Disease Prevention
- Genetic Disease Prevention
What is the West Nile Virus?

West Nile virus is carried by mosquitoes and if transmitted to humans, it can cause severe encephalitis. Horses affected with West Nile exhibit signs of ataxia, staggering or a wobbly gait.

The First Scare of West Nile in Florida

West Nile was introduced in Florida in 2001 by the spotting of a dead crow diagnosed with West Nile.

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
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<tbody>
<tr>
<td>Human West Nile Encephalitis</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>Human West Nile Fever</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Human Fatalities</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Horse Cases</td>
<td>&gt; 450</td>
<td>&gt; 499</td>
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West Nile became a big scare to South Florida due to the immense mosquito population.
What is Acute Laminitis?

The term 'laminitis' is used to indicate a spontaneous and diffuse inflammation of the whole of the sensitive structures on the foot. Blood vessels in the hoof arise and swell and hemorrhages of the laminal vessels occur. An improper feeding schedule can arouse and intensify laminitis.

How Acute Laminitis Occurs

Acute Laminitis often occurs from violent blows to the hoof, whether it be intentional from kicking or purely accidental. Overfeeding a horse often leads to laminitis as well.

"Whoever hath charge of a horse's foot has the care of his whole body"; "As well a horse with no head as a horse with no foot"
What Hyperkalemic Periodic Paralysis (HYPP)?

HYPP is a genetic disease found in the descendants of AQHA Stallion, Impressive, an exceptional halter horse. Symptoms of HYPP include muscle weakness, twitching and tremors, collapsing or “dog-sitting” and respiratory distress.

How HYPP is Caused

HYPP is caused from an incompletely dominant gene that is passed along from the extensive breeding of Impressive and his descendants.

Descendants of Impressive are tested for HYPP and are marked H/H for homozygous positive and N/H for heterozygous positive.
Viral Disease Prevention - West Nile Virus

For most equine viruses, a vaccine is available. Regular booster shots and semi-annual preventative shots are vital to a horse’s health. Usage and location of the animal should be taken into consideration as well.

Functional Disease Prevention - Acute Laminitis

“No foot, No horse” is often a common saying amongst horse owners. We can often prevent laminitis by not overfeeding our horses and working them on safe grounds.

Genetic Disease Prevention – HYPP

We can avoid owning a horse with HYPP by testing them before purchase. By not breeding heterozygous and homozygous HYPP horses, we eliminate the chances all together. This is often difficult due to the high demand of Impressive bred characteristics.
Overall, the more that we know about a disease, the better we are at being able to prevent it. By educating ourselves and others around us, diseases will be under more control and less rampant.
Thank You!