



Photo by Kaitlyn Nance

# Internal Medicine Booth

University of Illinois  
Open House 2021



# What is an Internist?

- A veterinarian specializing in internal medicine is trained to perform diagnostics and generate treatment plans for your pet's body systems.
- The conditions internists specialize in:
  - Kidneys
  - Liver
  - Pancreas
  - Circulatory system
  - GI tract
  - Lungs
  - Gallbladder
  - Urinary tract
  - Hormone/endocrine system
  - Immune-mediated
  - Reproductive tracts

# Why Might Your Veterinarian Refer to an Internist?

Although veterinary school does equip small and large animal veterinarians to diagnose and treat common diseases involving internal medicine; sometimes further expertise and more advanced diagnostics are necessary to “complete the picture” of a particular case.

Internists commonly receive cases that do not present with the classic symptoms of a particular problem, or they have outliers that may suggest secondary problems.

Your veterinary internist continues their education past the 4 years of veterinary school to complete an internship and a 3-year residency to advance their level of expertise even further. Once they complete the requirements they earn the title DACVIM (Diplomate of the American College of Veterinary Internal Medicine).



Picture By Samantha Gervens of her cat Blanca.

Come with us as we learn about  
some common diseases that  
veterinary internists see regularly...

# Feline Hyperthyroidism

-An excessive secretion of thyroid hormone by the thyroid gland

-Most common endocrine disorder in middle-aged cats

## -Classic Symptoms:

- Thin even though food consumption hasn't changed, unkempt, agitated, and sometimes a bulge in the neck

-**Diagnostics** that the Internist will perform:

- Blood work to check thyroid hormone levels

## -Treatment:

- Radioactive iodine, surgical removal of of thyroid gland, antithyroid drugs, or limiting dietary iodine

# Equine Cushing's Disease

- A progressive disease of the pituitary gland
  - The pituitary gland is responsible for producing many hormones, in Cushing's, the gland is overactive
  - Why? Dopamine is normally inhibiting the pituitary- if dopamine in the body decreases, the pituitary gland produces too much ACTH (adrenocorticotrophic hormone)
    - ACTH acts on the adrenal gland to stimulate cortisol production
- Symptoms: development of a long and curly hair coat, increased water consumption, increased urination, excessive sweating
- Diagnosis: Clinical signs + blood test results
  - Abnormal blood work: elevated glucose, insulin, cortisol, and ACTH
- Medical Management: administration of dopamine agonist called pergolide mesylate. This molecule stimulates dopamine production, which can then provide proper inhibition and regulation of the pituitary gland.



Photo by Kaitlyn Nance

# Diabetes

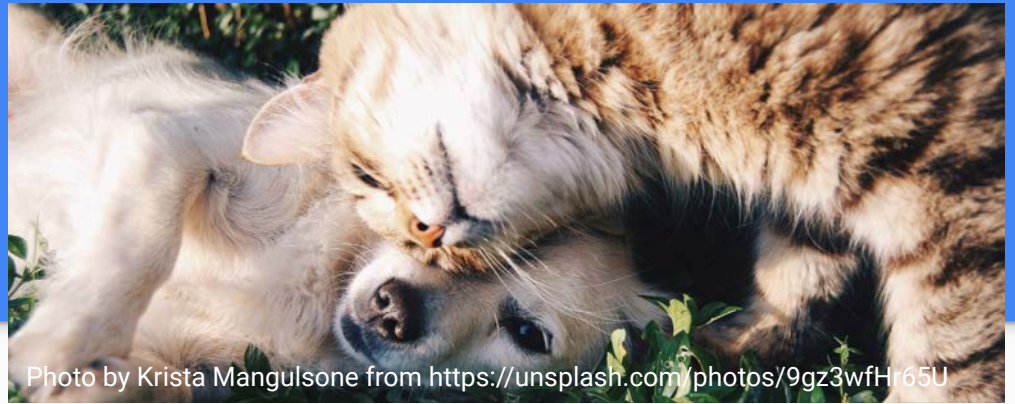


Photo by Krista Mangulsone from <https://unsplash.com/photos/9gz3wfHr65U>

- **A failure of the pancreas to produce the correct amount of insulin**
  - Type I: Loss of the ability to produce insulin, often due to an autoimmune disease or severe, recurring pancreatitis.
  - Type II: Inability for the pancreas to produce a high enough amount of insulin; often due to obesity or a hormone imbalance.
  - Both types of diabetes can develop in dogs and cats, but most dog diabetics suffer from type I.
- **Symptoms**
  - Without insulin the body can't use or store sugar and other high energy molecules, instead they remain in the bloodstream.
  - This issue causes animals to feel hungry and eat constantly, often while losing weight as the body breaks down it's fat and muscle to try and find a usable energy source.
  - This results in lethargy, weight loss and a high blood glucose level.
- **Treatment**
  - Treatment involves regular monitoring of the animal's blood glucose level and twice daily insulin injections for the rest of the animal's life. The dose will need to be determined over time by an internal medicine doctor as the proper dose varies between individual animals and may change over time.

# Immune-Mediated Hemolytic Anemia (IMHA)

In IMHA, the body's immune system destroys its own red blood cells. Usually this is a primary disease (happens spontaneously), though sometimes can happen as a result of another disease or toxin.

## Classic Symptoms

- Pale gums
- Weakness/tires easily, may even faint
- Panting and/or high heart rate

## Diagnostics

- Complete blood count (CBC) test in combination with a packed cell volume (PCV) to see how many red blood cells are in circulation
- A reticulocyte count - this shows how many immature red blood cells have been rushed into circulation prematurely

## Treatment

- Blood transfusion to help treat anemia symptoms
- For primary IMHA, immunosuppressant drugs such as steroids are used to prevent the immune system from destroying more blood cells



Photo by Gracie Wischmeyer