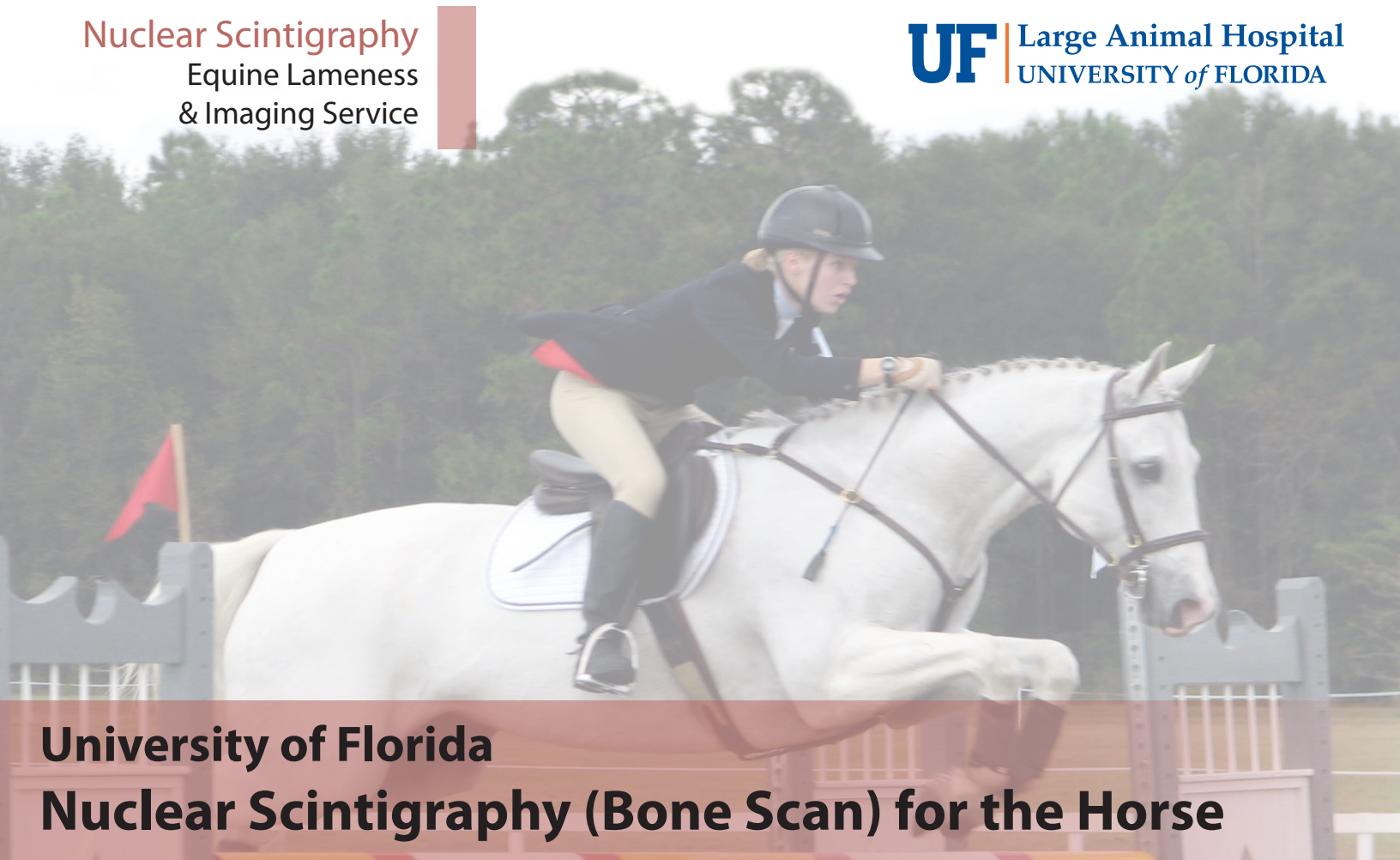
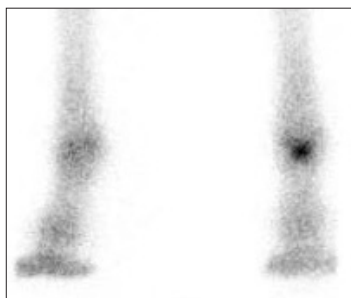


Nuclear Scintigraphy

Equine Lameness & Imaging Service



University of Florida Nuclear Scintigraphy (Bone Scan) for the Horse



Example image from bone scan. The dark indicates area of increased radioactive isotope uptake.

What is nuclear scintigraphy?

Nuclear scintigraphy, or bone scan, is a diagnostic tool used to localize orthopedic conditions such as bone fractures, joint inflammation, osteoarthritis and other injuries that may cause lameness. It is especially useful in areas that are difficult to image with traditional modalities such as radiographs (X-rays), including the neck, back and pelvis.

What does nuclear scintigraphy do?

Nuclear scintigraphy captures images of the horse's skeleton using a gamma camera that detects a benign radioactive isotope given intravenously. The radioactive isotope travels to bone and abnormal uptake and is detected as "hot" or "cold" spots. Uptake of the isotope helps pinpoint sites of injury or problems.

Is nuclear scintigraphy safe for my horse?

Yes, it is safe for your horse and is a relatively short procedure lasting only a few hours. The radioactive isotope is benign. The isotope decays 97% in 30 hours, so horses are able to leave the day following the procedure.

Bone Scan involves:

- Administration of a benign radioactive isotope to the horse that targets and labels bone throughout the skeleton.
- Skeletal imaging using a special camera, called a gamma camera.
- Identifying problem areas that have increased or decreased isotope uptake, which are seen as "hot" or "cold" spots on the images.

Nuclear scintigraphy is used to help localize a lameness issue.



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