Lameness is a common presenting complaint for all types of equine athletes. Some horses are overtly lame, others have decreased performance, unwillingness to hold or change leads, problems turning, or just aren't winning anymore. Some trainers and riders are extremely adept at telling you which limb is causing the issue, and can give an excellent description of what the horse is doing. Others will struggle with telling you which limb, or front or hind limbs, but listening to the riders description, and knowing what the horse had to do for a living can help point you into which corner of the horse may be the issue. When you begin to evaluate the horse, it is important to compare the horse in front of you to the description that you just heard, sometimes the lameness has resolved, or changed. It is your job to try to figure out why while you are taking your history and evaluating the horse, did the owner treat the horse with analgesics, has it been on rest, do they have their left and right mixed up, or is the lameness inconsistent or bilateral, or is there a neurologic component.

Develop a system for your evaluation. Try to do it as close to the same as possible every time. Ideally you will have a assistant or tech that can handle the horse for you. They know your system, and it is their job to protect you as well. Using clients to handle the horse can unnecessarily put you in precarious situations. I like to see horses trot in a straight line from the side, and circling in each direction on a smooth hard surface. Fortunately I get to do this on an asphalt parking lot, but a gravel drive can be utilized. Evaluation in a groomed arena can also be effective. If things seem inconsistent, I will proceed into a neurologic exam after the initial lameness evaluation. The exam may stop at the neurologic component or may return to the lameness evaluation. After the initial trotting, I will proceed with palpation of all four limbs, and distal and proximal limb flexions. Remember that flexions are not specific, and are only used to try to get you pointed in the right direction to speed the examination. It is impossible to flex only 1 joint at a time, and pay attention to flexing 1 limb may make the horse lamer in the opposite limb.

My goal is to get the lameness localized to an area in the most efficient manner possible. This means trying to combine peri-neural and intra-articular anesthesia to localize the lameness with the least number of needle sticks possible. Trying to do this, you will occasionally block too large of an area and have to come back on another day, but doing every block working from distal to proximal on every horse can also be time consuming and result in a horse that quickly tires of the diagnostic anesthesia.
I will put hoof testers on almost every lame limb, and compare to the contralateral limb. If there is a positive response, I will usually start my diagnostic anesthesia at the foot, as it is the most common location of equine lameness. Diagnostic anesthesia is continued in a systematic manner until the lameness is localized to a region. It is important to remember that the diagnostic anesthesia is not specific and may rapidly diffuse within the region. This makes checking the block to determine desensitization as important as the block itself. It is also important to remember that some lesions such as subchondral bone cysts, have very unpredictable responses to anesthesia.

Once the lameness has been localized we must try to achieve a diagnosis based on the available imaging modalities. Radiographs and ultrasound are relatively routine, in most cases, and can be very specific, with limited sensitivity. We may then treat based on a definitive diagnosis, or a lack of a definitive diagnosis. Advanced diagnostic imaging such as MRI is now widely available for evaluation of the mid to distal limb of most equine patients. While not necessary to achieve a diagnosis in all cases, we shouldn't underestimate its ability to provide additional information in almost all cases.

Many treatment modalities are available for our equine patients. Regenerative therapies such as stem cell therapy, platelet rich plasma, and regenerative laser therapy are now widely available. Indications for the use of these therapies depend on a definitive lesion that can be accessed for therapy, and the patient having the time necessary for these modalities to help promote healing. There is still no replacement for time. Even regenerative therapies don't do much to decrease the time necessary to heal an injury, but they can improve the quality of healing and decrease the incidence of re-injury.

We will discuss the evaluation, diagnosis and treatment of several cases and try to touch on other treatment options that are available. This is intended to be interactive and will discuss my opinions on the cases presented, as well as other ideas from the audience.