The diverse caseload of the UC Davis William R. Pritchard Veterinary Medical Teaching Hospital (VMTH), and the ensuing experience gained from that caseload, holds many benefits for all involved. Never has this been more true than for the Large Animal Clinic’s Ultrasound Service, specifically with pelvic ultrasound examinations on horses.

Having conducted more than 325 pelvic ultrasound examinations since 1999, the VMTH’s experience in this area may not be rivaled by any other veterinary hospital. Ultrasound practitioners from around the world are taking note as VMTH faculty share some of that experience. Interest in UC Davis’ ultrasound experience has been so strong that a Facebook page (www.facebook.com/UCDLargeAnimalUltrasound), dedicated specifically to ultrasound, has been created.

“Our page has been very popular with followers from over 20 countries,” states veterinarian Mary Beth Whitcomb, section head of the Large Animal Ultrasound Service at the VMTH. “It continues to grow at a steady rate.”

As a leader in equine pelvic ultrasound, Whitcomb collaborated with John Doval of the school’s MediaLab to develop several 3D instructional models (some shared on that Facebook page) on how to conduct pelvic ultrasound examinations. These models are used extensively to teach students and veterinarians about the role of ultrasound to diagnose pelvic fractures. Whitcomb routinely presents her ultrasound experience at continuing education seminars nationwide, such as the annual American Association of Equine Practitioners conference.

Using the most advanced ultrasound machines—selected for their excellence in musculoskeletal imaging—Whitcomb and fellow veterinarian Betsy Vaughan can diagnose fractures in the equine pelvis more efficiently and safely than with radiography.

Ultrasound (also commonly used to diagnose soft tissue and joint damage) is minimally invasive. The ultrasound probe is positioned on the horse’s skin and moved along the bony surfaces of the pelvis. A displaced fracture can easily be determined by an alteration in the solid bright line that represents the bone’s surface on the ultrasound screen. Clinicians also perform rectal examinations to see those parts of the pelvis that cannot be seen through the skin.

Fractures are often the result of a fall and usually cause the horse to be severely lame (visible at the walk). While fractures can be found throughout the pelvis, the most common fracture diagnosed at the VMTH is a chip fragment of the acetabular rim (hip joint socket).

“For me, the best benefit of pelvic ultrasound is that it often provides a definitive answer,” states Whitcomb. “If you’ve found a pelvic fracture, you’ve found the answer. Being able to give a positive diagnosis to a stressed client is very satisfying from our standpoint and from the client’s standpoint.”