Purpose of study
The primary aim of the study is to assess the effect of platelet-rich plasma (PRP) in fracture healing. PRP has many growth factors that stimulate healing. We will assess the effect of immediate PRP and delayed application of PRP in dogs with naturally occurring radius and ulna fractures.

Inclusion criteria
• Adult dogs with a closed transverse or oblique radius and ulna fracture.

Exclusion criteria
• Immature skeletal development, cardiovascular disease that may affect anesthesia, evidence of skin infection/injury to incision areas, polytrauma involving fractures of multiple bones, evidence of bone-associated neoplasia, obese body condition score (>8/9), and unable to comply with follow-up appointments.

Study procedure
Dogs will be randomly assigned to 1 of 3 treatment groups: Control (standard surgical repair), PRP immediately applied to the fracture site after repair, delayed PRP administered 2 weeks after surgery. Recheck examinations will be performed every 2 weeks for 8 weeks.

Study benefits
• The study will cover the expenses for PRP collection and processing, injections, follow-up radiographs and follow up data collection.

Costs to client
Owner will be responsible to pay for the initial exam visit, blood work, radiographs at day of first visit, surgery and anesthesia, and any cost connected with unrelated health issues of their pet during the study. If the dog and owner comply with study procedures and all recheck examinations, a $2000 credit will be applied to the patient’s charges.

Contact information
Greg Woo, DVM
Samantha Shetler, DVM
Darryl Millis, DVM, MS, DACVS, DACVSMR, CCRP
Jessica Montoya, AAS, LVMT, CCRP, VTS-Surgery
utvetortho@utk.edu | 865-974-8387