Abstract: Thyroid disease is common in dogs with the incidence of hypothyroidism approaching 30% in some breeds. Evaluation of thyroid function currently involves comparison of thyroid hormone concentrations in an individual patient with reference ranges generated from past testing of dogs of many breeds. However, since all-breed reference ranges generated from past testing are generally accurate, they may not be optimal for some individual breeds, necessitating the generation of breed-specific thyroid reference ranges. In thyroid testing specific for three breeds (Irish Setters, Rhodesian Ridgebacks and Whippets), dogs will be examined and tested sequentially to insure a healthy cohort for generation of a breed specific reference range for a panel of thyroid function assays. Once completed this study will generate breed specific thyroid testing reference ranges for three dog breeds. This work offers immediate and tangible improvements in canine health by refining thyroid testing interpretation in purebred dogs.