

Juvenile Renal Dysplasia (JRD) affects young dogs of several breeds. Affected dog's kidney(s) do not mature properly, and the dog show increased amount of urination (unconcentrated urine), increased intake of water, vomiting, lethargy, and weight loss. The kidney(s) of the affected dogs may appear small and irregularly shaped by ultrasound examination. Clinical signs may not be present unless over 75% of the kidney is affected, but because the "intact" part of the kidney has to work harder, the strain will eventually lead to kidney failure between age of 6 weeks and 4 years in most cases.

A particularly high prevalence in certain breeds, as well as clustered occurrence in certain pedigree suggests a genetic predisposition. We, the dog disease mapping project at the Broad Institute, would like to identify the mutation(s) responsible for JRD in Golden Retrievers, by comparing the genome of affected and healthy dogs using the new SNP array tool. For the study to be successful we need to have a sufficient number of JRD-affected dogs and to participate in our study to compare to healthy individuals. Therefore, we would like for the owners of dogs that are suspected to have JRD to contact us, so that we can arrange for blood sample collection and histopathological phenotyping. Once the gene(s) and the mutation(s) that cause JRD have been identified, a genetic test can easily be developed for carrier testing. Early identification of carriers and affected dogs without clinical signs will also allow early intervention for the affected dogs.

If you have any questions, concerns, or would like to participate in this study, please contact Michele Perloski, our sample coordinator, at the following:

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Most sincerely,

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