

From: Vince Tantaro <president@gsdcouncilaustralia.org>
Sent: Tuesday, 8 October 2019 3:29 PM
To: 'Robert Zammit' <robert@vineyardvet.com.au>
Cc: Candy Baker GSD Health <gsdhealth@gsdcouncilaustralia.org>; Karen Hedberg <gsdvetkh@bigpond.com>; GSDCA Editor <revieweditor@gsdcouncilaustralia.org>; GSDCA Judges Chair <judgescommittee@gsdcouncilaustralia.org>; GSDCA NBC Chairman <nbc@gsdcouncilaustralia.org>; GSDCA Obedience Chair <obedience@gsdcouncilaustralia.org>; GSDCA Secretary <secretary@gsdcouncilaustralia.org>; GSDCA Treasurer <treasurer@gsdcouncilaustralia.org>; Robyn Knuckey (Private) <robyn.knuckey@gmail.com>
Subject: RE: GSD Genome Project

Hello Robert,

Firstly thank you for your thoughts and words regarding Andrew- yes time will heal.

Congratulations on what must be one of your truly fulfilling accomplishments!

Can you please provide an article in Layman's terms for inclusion in the QNR! This is ground breaking work that will assist all breeds of dogs!

Very proud of you and the team!

Kind regards

Vince

PS: do you mind if we send this to the SV for information? and include your details for further contact?

From: Robert Zammit [<mailto:robert@vineyardvet.com.au>]
Sent: Tuesday, 8 October 2019 3:13 PM
To: 'Vince Tantaro'
Subject: GSD Genome Project

Hello Vince

I have worked tirelessly with Prof Ballard on the genome project for the German Shepherd Dog. I can now announce that our work has been accepted and the genome of the GSD has been accepted and published by the NCBI.

This means much for the breed I love as it will allow comparative DNA studies to find mutations for heritable diseases in our breed. To explain this further, as the

genome in a breed that has a similar disease becomes published will be able to locate the DNA markers by comparison rather than just fishing along the vast Chromosomes road for our breed. In fact, we have developed a system whereby we will vastly decrease the cost for any one breed (even though our publication was over \$80K). Once we complete the next section for publication it may well mean that other breeds can have genome completions for around \$25K. We did a more complete finish on GSD because we had many laboratories throughout the world working with us on this project. Statistically, the GSD genome published has been rated much higher in quality than the one published for the Boxer.

The published data is available at :

https://www.ncbi.nlm.nih.gov/assembly/GCA_008641055.1/#/st This is complicated when examining this site but It will be more meaningful to us, the lovers of this breed as it becomes more useable with comparative studies.

This is the National Center of Biotechnology Information which is part of United States National Library of Medicine (branch of the National Institute of Health). Further papers will come from this but ultimately it will help our breed and it brings me much closer to finding the many genetic mutations involved in canine hip dysplasia.

On a personal note, I cannot begin to imagine what the loss of Andrew has meant to you and your family. I do remember all of you in my prayers and please know that if I can help in any way you need only ask.

My very best wishes