June 30, 2016

Re: WSAVA Hereditary Disease Committee - Annual Report June 2016

Dear WSAVA Board and Assembly Members,

The WSAVA Committee on Hereditary Diseases provides small animal clinicians with clinically relevant information on hereditary diseases and genetic predispositions to disease in dogs and cats. Since it is difficult for a clinician to keep up with the rapidly accumulating information on clinical genetics and the large spectrum of disorders and genetic predispositions, the Committee aims to provide readily accessible comprehensive resources in various forms on hereditary disease testing and management in small animals as needed for the veterinary clinician worldwide.

The Committee, chaired by Prof. Dr. Urs Giger of the University of Pennsylvania, includes Prof. Dr. Jerold Bell of Tufts University and private practice, Dr. Neale Fretwell of Mars Veterinary, Prof. Dr. Ake Hedhammar of the Swedish University of Agricultural Sciences, Dr. Cathryn Mellersh Animal Health Trust UK, and Prof. Dr. Claire Wade of the University of Sydney. We usually communicate by email and conference calls and hold annually 1-2 meetings usually associated with a conference we attend anyway.

The Committee aims to facilitate education by offering and participating in hereditary disease programs at national and international veterinary conferences, gathering listings/links to current research studies on genetic diseases, and screening opportunities, and providing information on-line to help facilitate clinicians with their diagnosis, treatment and control of hereditary diseases in dogs and cats.

The Committee had also launched a web search tool to find information about the diseases for which there are genetic (DNA) tests, and which labs provide tests for them. This database is one of the most frequently accessed resources on the WSAVA website and its home at the University of Pennsylvania. The WSAVA Hereditary Disease pages can be found at http://www.wsava.org/HereditaryDefects.htm, and the genetic testing lab database may be reached through the test and testing facility link on the website. Our major task last year has been the up-keeping as many new hereditary diseases are being characterized at the molecular genetic level. Moreover, new laboratories are offering testing and some are expanding into large panel screening. We are adding quantitative objective measures on which tests should be considered by clinicians and breeders and for wellness screening of puppies and kittens as well as some form of quality assessments of laboratories. We are also hoping to expand the web source by adding other genetic tests.
than DNA tests. This will require new and major programming which we are exploring. Indeed the updating of any information proved extremely tedious.

Thus, there are some big challenges that are being tackled by the Committee (1) finding and designing new home for the large database, (2) including new technologies with cost-effective breed and species-specific panel tests, (3) additional diagnostic tests for hereditary diseases beyond DNA tests, (4) guidelines for quality assessment of tests, and (5) recommendations for employing these tests in small animals. In addition, the Committee is involved in gathering clinical information on genetic diseases and predispositions in conjunction with the Veterinary Information Network (VIN). Finally, the members are writing position papers on genetic disease testing, laboratory accreditation, genetic counseling, role of veterinary clinician in diagnosis, management, and control of hereditary diseases.

While the WSAVA Hereditary Disease Committee will not be at the annual WSAVA congress in Colombia this year, Prof. Dr. Kate Meurs will speak extensively on congenital heart defects. However, the Committee members are giving extensive seminars and lectures at other international conferences such as ACVIM, ACVP, AVMA, ECVIM, SEVC, etc. Furthermore, as the Committee chair was the recipient of this year’s AVMA and Winn Feline Foundation Award for Feline Research several opportunities presented to showcase the WSAVA Hereditary Disease Committee’s work. It should also be noted that several Committee members are actively involved in original hereditary disease research studies in dogs and cats.

We are also aiming to be presenting next year (2017) at the International Canine and Feline Genome and Hereditary Disease Conference in Minneapolis, The Dog Health Workshop in Paris, and WSAVA in Copenhagen. In addition, Committee members have spoken on hereditary diseases in many different countries including Bulgaria, China, Germany, Great Britain, Hong Kong, Hungary, Lithuania, Philippines, Switzerland, Thailand, Russia, and USA and plans to speak internationally based upon the geographic needs.

Mars Veterinary/Waltham has graciously agreed to sponsor $15,000 per year from 2015-2017. The support is non-restricted for the WSAVA Committee activities including the assistance with the database activities and a smaller portion for travel for committee members if no other funds are available as speakers.

Thus, the WSAVA Hereditary Disease Committee has been active and is continuing its path on assisting the WSAVA Global Veterinary Community in handling the genetic aspects in companion animals.

Sincerely

Urs Giger
Charlotte Newton Sheppard Professor