

SYRINGOMYELIA NEWS

Summer 2004

A research update

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We now have over 450 blood samples collected in the UK, USA, Canada and Netherlands and we hope to involve other countries yet. This is a truly magnificent international effort to find the causal genes for 3 significant diseases in Cavaliers!

BLOOD DRIVE sponsored by Cavaliers of the Northeast (USA)

In conjunction with CNE's Annual Specialty show, 26 Cavaliers bit the 'bone' and braved the needles of veterinary technician, Sharon, who spent the day extracting blood for DNA research into SM, MVD and epilepsy. We are grateful to Sharon for her time and expertise and we are especially grateful to Anne Eckersley who organized this successful blood drive and to Liv Tyler (a.k.a. Arwen in the film Lord of the Rings) who lent her support in the effort to help fight the ravages of SM. Liv donated an original signed photo of herself with her Cavalier, Neal, which was part of the silent auction. All proceeds from the sale of this signed photograph, and from the raffle, were earmarked for the Canadian group who are conducting the DNA research.

There were delicious edibles for both man and beast at the blood drive table and each donor Cavalier received a gift of all natural treats in a gift bag. The banner and instructions board brought much interest and 100 envelopes of the phenotype forms and instructions on where to send blood, were given out in the hope that breeders and Cavalier lovers would go home and ask their local vet to extract blood from all of their dogs. Thank you letters were sent out to each person who agreed to have blood taken from their Cavalier(s) with a pen on which is printed CNE's new slogan 'My Cavalier gave the Gift of Life!' This blood drive certainly was educational for everyone and brought to light that there is indeed something to be done to help the researchers.



Cavalier Blood is a Gift, a Treasure, a Lifeline.

There are a lot of preparations to be made before a genome scan is possible.

All the data has to be collected, processed and analysed and this takes careful planning.



The Principal Investigator, Dr Guy Rouleau (left) seen with two of the research team, Claude Marineau and Melanie Bernard at the McGill University Health Centre, Montreal.

We must have really accurate information on the phenotype forms to ensure the quickest success. Both Syringomyelia and Mitral Valve Disease have a varied and late onset.

It is crucial that DNA donors update their phenotype forms if there are changes in the clinical status of their dog or they have a MRI scan confirming SM status.

We have refined our phenotype forms to take account of our improving knowledge of Syringomyelia. Having DNA from MRI confirmed unaffected or affected dogs is clearly particularly useful to the study. Thanks to Simon Swift, the MVD section of the phenotype form has been reworded to be more user-friendly. We still need more blood from dogs affected with MVD at an early age. It would be such a shame if the opportunity was lost to include this disease in the first genome scan.

Epilepsy now has a separate phenotype sheet so that full justice could be done to this complex disorder.

Mail/Fax/email PHENOTYPE UPDATES to Clare Rusbridge (details top of front page)



Wendy Hallows at the UK Archive has been extracting DNA from the blood samples in laboratory in Manchester

The revised forms are available on the www.thecavalierclub.co.uk. together with an article called 'Syringomyelia made simple' to help owners' understanding of some of the terminology of the condition and providing some answers to questions about donating blood. Any queries about donating blood please contact Penny Knowler (details front page)



In Michigan, USA, the team's IT Consultant, Marlene O'Connell has the difficult task of creating a tool to convert Penny's database to a powerful statistical programme. This will help to identify clear breeding lines as well as clarify the mode of inheritance for the various diseases

We should like to acknowledge all caring & responsible people who have given precious time and effort to donate blood from their cavaliers to help the research into Syringomyelia and MVD. A DNA donor list has been set up on <http://www.thecavalierclub.co.uk/syringo/dnadonor.html> for those donors who have contributed and are willing to have their names published –not all contributors may be aware of this yet. Many owners have paid all expenses themselves and in some cases vets have waived their fees. This has greatly extended the use of the original contribution made by Boehringer.

Priority dogs for DNA collection

Normal healthy, over 7 years or MRI confirmed normal (any age)
Champions that often appear in pedigrees (any age)
SM Affected –MRI confirmed or showing typical clinical signs
MVD affected and their relatives
Parents and siblings of affected dogs (SM or MVD)
Offspring of affected dogs – if <3 years of age the blood may be stored in case signs develop later.

Blood (in EDTA) may be sent with phenotype form and pedigree to:

USA
Diane Shelton DVM, PhD
Berge A Minassian MD, CM FRCP(C)
Comparative Neuromuscular Laboratory
Department of Pathology

Canada
Room 6536B
Hospital for Sick Children

Basic Science Bldg, Room 2095
555 University Ave.
9500 Gilman Drive
La Jolla, CA 92093-0709
M5G 1X8 Canada

Toronto, Ontario

Netherlands
Laboratorium,
Universiteitskliniek Gezelschapsdieren,
Yalelaan 8, Utrecht,
t.a.v. Marijke Kwant,
Antwoordnummer
8437, 3500 VW Utrecht

Biochemisch

UK
Wendy Hallows
UK DNA Archive
Veterinary Science Building
Crown St
Liverpool L69 7BR