

Excellence will be tolerated

# PERFECTION IS OUR GOAL



Photos: courtesy of SMDC

*The trot up lanes at the SMDC emphasise the importance of the clinical examinations.*

The Sporthorse Medical Diagnostic Centre (SMDC) is a new top level equine clinic and 'centre of excellence' located in Heesch, The Netherlands, specifically geared towards diagnostics and treatment of orthopaedic problems. The site was home to an already existing veterinary clinic, but founders Dr Erik Bergman and Dr Frans van Toor rebuilt all the facilities and the new SMDC opened its doors in September of 2015.

## CLIENT IS KEY

The client is key at the SMDC, offering high quality, specialised equine veterinary care. Direct

communication and anonymity if desired are important values within the SMDC. The setting was kept deliberately small, to ensure quality

of care for the clients and their horses, as well as efficiency. The founders both enjoy a big reputation, working at highly acclaimed equine

clinics in The Netherlands and far beyond. Both are internationally recognised orthopaedic specialists with a vast international network of

clients and referring veterinarians. Erik Bergman decided to strike out on his own with this new clinic, as treating sport horses is a world apart

in its own right; "You have to do what you love and what you are good at," he says.

## UNIQUE CONCEPT

Enthusiasm, passion and the will to dedicate themselves fully to the welfare of top sport horses and their owners have led to this concept, which is unique in Europe. Currently, three veterinarians are employed at the clinic, Dr Bergman, Dr Van Toor and intern Dr Van Veggel. They are supported by a team of four veterinary technicians. A new intern is brought in from abroad each year to increase knowledge, which of course works both ways.

## ALL ABOUT ORTHOPAEDICS

The SMDC boasts all of the most modern facilities. The exterior grounds of the clinic reveal a large entrance gate with ample parking space for horse lorries. WiFi, electricity and running water are also available. Clients can bring their horses to the designed waiting boxes, after which they are welcomed themselves in the spacious reception area. Everything inside and outside the clinic is geared towards orthopaedics; including pre-purchase and lameness examinations and examinations of the neck and back. Trot up lanes, lunging circles and a large outdoor arena all serve and emphasise the importance of the clinical examinations.

## ADVANCED IMAGING

In addition to modern radiography and ultrasound equipment, the clinic also has so-called advanced imaging techniques. These include state of the art scintigraphy, where the horse is injected with a

*"Thanks to the most modern techniques, the risks of general anaesthesia can be avoided entirely in this way." – Dr Erik Bergman*

radioactive material and scanned in a standing position to show any changes in the bone as well as the attachments of the tendons and

ligaments; a standing MRI, where the legs of the standing horse can be imaged in incredible detail; and UTC (Ultrasound Tissue Characterisation), a technique used to judge the quality of tendon tissue. All of these techniques fall under daughter corporation SMDC-Advanced Imaging, where Bergman and Van Toor share collaboration with two highly experienced sport horse veterinarians: Dr Verhaeghe and Dr Van Hoeck. The entire premises and the stables are equipped with surveillance cameras to ensure the best possible security, care and quality.

## A NETWORK OF SPECIALISTS

Thanks to its international network, the clinic can always count on the best specialists. In all cases, the SMDC serves as the main link between client, patient and the designated specialist, for instance in the case of internal and surgical patients. This multi-disciplinary approach ranks very high on the SMDC's standard. There is intensive collaboration with certified physiotherapists, chiropractors and farriers. The collaboration even extends into the fields of equine dentistry, bit fitting, saddle fitting, and so on.

## REVOLVES AROUND QUALITY

Everything at the SMDC revolves around the best care and the highest quality. The deliberate choice was

made to only offer treatment and examination of the standing horse. "Thanks to the most modern techniques, the risks of general anaesthesia can be avoided entirely in this way," Bergman explains. In certain cases requiring surgery, patients are referred to specialists within the SMDC's network.

## ISELP

Both entrepreneurs, Bergman and Van Toor, are ISELP (International Society of Equine Locomotor Pathology) certified. Dr Bergman also serves on the board of the International Society of Equine Locomotor Pathology. The goal of ISELP is to provide contemporary knowledge and techniques in the continually evolving field of equine locomotor analysis to better prepare the equine clinician to understand and manage lameness conditions in the equine athlete. To this end, the SMDC organises an annual meeting for around 150 equine veterinarians from all over the world to further their education at the highest level.

## VISION FOR THE FUTURE

"The SMDC wants to have its doors open for everyone, and we hope to continue to offer the highest quality of care," Bergman shares his vision and goal for the future. "This requires constant re-education to maintain our knowledge and skill levels; as well as investment in the latest technological developments and in-depth communication with the owners and referring veterinarians."



*Ultrasound Tissue Characterisation, or UTC, is a technique used to judge the quality of tendon tissue.*

## A VISION ON MODERN SPORT HORSE BREEDING

In the WBSFH Studbook Rankings, the Dutch KWPN studbook takes a very prominent place in both dressage and jumping horse

breeding. One of the reasons for this, in Dr Erik Bergman's view, is the fact it uses the strictest selection methods in the world. In the past few years, in addition to phenotypical methods, developments have also been made in genotypic methods: genome selection.

## NO COMPROMISE

When we ask Dr Bergman to highlight what he thinks is the biggest problem facing modern day sport horse breeding, he starts: "Imagine the goal of a breeder is to breed a talented sport horse, which meets the health and soundness standards of a modern day sport horse approval. It turns out not every breeder is in a position to produce an approved stud horse which meets this high standard at this time." He continues; "Thanks to radiographic examinations for hereditary characteristics such as navicular disease, spavin and osteochondrosis, huge progress has been made in the past few decades." Bergman also adds that he believes it is very important that the breeding world continues to adhere to these high standards and does not compromise as long as its ideals have not yet been reached.



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## THE UNKNOWN FACTOR

Bergman thinks studbooks – in addition to taking known hereditary factors into account – would be wise to account for other factors as well, which may as of yet still be scientifically unknown. He thinks there are still many areas with much to gain. For instance cervical (neck) and thoracolumbar (back) conditions. “In the present day, involving the spine in the radiographic pre-purchase or sale examination is becoming more and more ‘standard’. This is due to the simple fact this area ranks among the top-5 of problem spots for top sport horses (the others being the navicular area in the lower foot, the suspensory apparatus and the hock and stifle joints).” In Bergman’s opinion, major

strides could be made if in the future, at least a few radiographs of the lower cervical and mid-thoracic areas would be incorporated in the selection process.

others base their approval on the number and location of these bone fragments; and yet others only select on OCD. Most chips are not acceptable for the sport horse’s

## SUSPENSORY CONDITIONS

When we speak of soft tissue problems, such as in the navicular area in the lower foot and the

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## CHIPS (OCD OR OTHER) IN THE JOINTS

This issue is dealt with very differently by the various studbooks: one does not allow any findings,

health, but thankfully the majority of these fragments can be removed surgically. The goal of breeding in general should however be to prevent them entirely.

suspensory apparatus, the general consensus usually is that environmental factors are to blame (nutrition, rearing and training). Yet according to Bergman, genetic factors are also involved to a degree. “It is very difficult, if not impossible, to make any kind of judgment on this in breeding at a young age, given the fact these problems often only show themselves at a later age.” So the link to genome selection is made.

## BRIDGING THE GAP TO GENOME SELECTION

All phenotypical traits (conditions) compose of environmental factors as well as a genotypical component. This means everything has a genetic factor and therefore a hereditary factor. It is clear that conditions with a high hereditary degree, such as navicular disease, are easier to ban in breeding. “I think genome mapping and genome selection will help breeding forward by leaps in the future. As soon as we know where to look, this will mean a huge step in speed and efficiency, with lower costs and a greater indicative value for younger horses. In the long term, the genetic origin of more and more conditions will be discovered, and breeding can act on that.”

## HAVING THE COURAGE TO MAKE STEPS

Bergman concludes; “For now, however, I think it is most important that studbooks have the courage to make steps for additional selection criteria. Approved sires and dams will have to conform to sport horse standards as much as possible. A two-phase transition towards genome selection, where the horse is selected by radiographs and genotype could be a step in the right direction. I expect, and trust, that top sport horse breeding will see huge developments over the coming decades.” ■



Beside diagnostics, SMDC also offers many state of the art therapeutic solutions, like here treating a horse with focused shockwave therapy.