

An interview with Prof. Didier SERTEYN

Faculty of Veterinary Medicine, ULiège, Equine Teaching and Clinical Department (DCE), Equine surgery, FARAHA: Comparative Veterinary Medicine



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Could you tell us about your expertise in the field of equine medicine?

As the head of the equine surgery, anaesthesiology, and post-operative care section at the ULiège Faculty of Veterinary Medicine, I spent much of my career treating horses and teaching equine surgery to veterinary students.

Could you tell us about the activities of the Equine Teaching and Clinical Department (DCE)?

In terms of teaching, the Equine Teaching and Clinical Department receives horses on referral for the treatment of serious and severe pathologies requiring surgery most often under general anaesthesia. These include traumas such as wounds, pathologies of the locomotor system and intestinal pathologies such as colic. Colic is a major cause of death in horses and requires an emergency response, as septic shock can lead to death if surgery is not performed. On average, we carry out 150 operations a year for colic alone.

In the field of clinical research, our work aims to gain a better understanding of the

triggering factors of these pathologies, and to reduce their consequences and incidence. Our projects focus mainly on myopathy, particularly post-anaesthetic muscle necrosis, the locomotor system (laminitis, orthopaedic pathologies linked to growth in collaboration with the European Horse Centre at Mont-le-Soie in the Ardennes) and osteoarthritis.



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Could you give us a few examples of fundamental research projects within the FARAH Unit?

I'm working in particular with a centre specialising in the study of activated forms of oxygen (oxidative stress), generated by violent inflammatory reactions or mitochondrial dysfunction (Center for Oxygen Research and Development). The aim is to understand their roles in myopathies and intestinal pathologies. In fact, it was while taking muscle microbiopsies that we discovered a new population of stem cells: we are currently studying their secretum, i.e. their mechanism of action, in order to explore their therapeutic potential.

What do you see as the main challenges in improving the clinical and surgical management of equidae?

For me, the main challenge lies in exploiting the university patent filed following the discovery of this new stem cell population and to offer innovative treatments for severe conditions in horses. The patent consists of a minimally invasive sampling method: muscle microbiopsy. This method, which aims to stimulate the production of stem cells, has been licensed exclusively to the [Revatis](#) spin-off. Developments in veterinary and human medicine already look promising.