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The Danish pig breeding industry now has a new significant global player: Danish Genetics "Our mission is to be one of the leading and most efficient breeding companies in the global market."

The name is new, and the ambitions are sky-high for the Danish pig breeding industry's new international player, Danish Genetics, who combines absolutely world-class genetic expertise with a strong marketing platform and more than 100 years of pig breeding experience. The name Danish Genetics hides a world-class breeding programme supported by a wide range of Danish breeders, multiplication specialists and vendors, and one of the world's most dynamic organisations in the field of animal genetics, the University of Edinburgh's Roslin Technologies.

The initiative to create Danish Genetics was taken by 25 of the Danish pig breeding industry's most experienced company owners. The company was officially established at the first general meeting on 15 August 2018.

The decision to establish Danish Genetics was a logical consequence when Danish Agriculture and Food Council decided to change the DanAvl system. The 25 companies were given notice of termination by the Danish Agriculture and Food Council when they refused to accept the new monopolistic DanBred system, which demanded that the nucleus and multiplication owners start producing under licence with no involvement or influence on the commercial side of the business.

The establishment of Danish Genetics guarantees free competition within the development and sale of Danish pig genetics

"We couldn't see ourselves and our companies under the new structure and the one-sided conditions dictated by the conversion of DanAvl to DanBred. We could not accept that many of our most important assets and business activities were to be taken over by DanBred, leaving our companies of long standing as licensed producers for DanBred without any influence on the important commercial activities. By establishing Danish Genetics, we therefore chose to ensure free competition within the development and sale of Danish pig genetics," says the Chairman of Danish Genetics, Mads Kring, Breeding Centre Rønshauge.

The parties behind Danish Genetics have experience with the export of breeding animals and genetics to more than 40 countries and have a combined annual turnover of more than DKK 1.5 billion. The parties have more than 37,000 purebred breeding sows in Denmark and abroad with a very large amount of the former Danbred purebred sows. With this genetic population, an excellent health status and top-class breeding animals, Danish Genetics sets sail with a world-class breeding programme.

The new constellation will benefit global pig producers

"With Danish Genetics we have created a new constellation based on the needs of the market. We are not governed by political agendas, but have a commercial outlook, and we safeguard free competition of Danish pig genetics for the benefit of the global pig producers."

"Our mission is to make pig production a more profitable business for our customers around the world. The potential lies in the genes, and in the collaboration with the experts through Roslin Technologies, Edinburgh University. We base our business on our huge genetic population, taking it to new levels," says Mads Kring.

One of the world's leading experts in genetics, breeding and biotechnology

Roslin Technologies is the commercial arm of the famous animal science research establishment, the Roslin Institute, which employs more than 500 researchers and geneticists, located in Edinburgh, the very core of animal biotechnology and veterinary research expertise in all of Europe. Over the decades, the Roslin has been behind ground-breaking and





innovative research, which has led to several technological breakthroughs including genome selection, stemcell technologies & animal development. The Roslin first attained worldwide recognition and became known to the general public in 1996, when researchers bred the first cloned mammal from an adult cell and produced Dolly the sheep.

"With Roslin Technologies as the optimal partner, we make sure that our breeding programme benefits from state-ofthe-art research and technology, which will form the basis of the continued genetic development of our breeding animals," says Mads Kring.

"A perfect match that has the potential to create significant progress within pig breeding"

"Danish Genetics and Roslin Technologies are a perfect match," says Glen Illing, CEO of Roslin Technologies.

"With the combination of one of the world's leading breeding companies and one of the world's most innovative institutions within animal genetics, we bridge the gap between science and business. With innovative thinking and new technologies, we have a unique opportunity to create significant progress within pig breeding. We can increase the efficiency and profitability of the pig breeders, so they are in a better position to face the demands of the future and, what is perhaps more important, we can challenge the industry's current norms for the benefit of the world's pig producers," says Glen Illing.

"With our commercial outlook, we will take Danish pig breeding's strong global position to next level"

Thanks to many years of targeted breeding work, the Danish pig breeding industry has delivered strong results and top-class animals with the qualities and the health status required in commercial markets. The result is a high demand for Danish genetics.

We have bred some of the most productive and profitable breeding animals in the world which have high fertility, high growth rate combined with a high feed conversion and good meat percentage.

"All these traits result in good growth and a higher return. With our commercial outlook, we want to continue this trend and be our customers' preferred genetics business partner. We take this task very seriously, which is why we cooperate with Roslin Technologies and focus our efforts and systematic work on developing tomorrow's breeding animals with one of the world's most efficient and innovative breeding programmes," says Mads Kring.

Close dialogue with the customers about breeding targets

Danish Genetics sets the breeding targets for each of the three Danish breeds, Landrace, Yorkshire and Duroc, with the ambition to maximise the potential financial returns.

"Our strong genetic population and the traits we have targeted in our breeding program constitute the foundation for our work. This includes aspects such as growth rate, feed conversion, fertility, meat percentage, longevity and strength. However, as part of the extensive development work we have commenced in collaboration with Roslin Technologies, we analyse the traits and our breeding targets to determine, in collaboration with our customers, which new traits would increase our customers' profits from breeding," says Mads Kring.

"With Roslin Technologies as our genetics partner, Danish Genetics can not only monitor the development but actually take the lead and influence future pig breeding with increased competition on development and sale of world-class Danish pig genetics, "Mads Kring concludes.

Facts about Danish Genetics

- A breeding company established by 25 Danish Nucleus farms, multiplication farms and vendors.
- Roslin Technologies of the University of Edinburgh is the strategic business partner for genetics.
- A breeding programme with Danish Landrace, Danish Yorkshire and Danish Duroc as well as hybrid animals
- The only Danish breeding and AI programme which is PRRS-negative
- All herds are part of the Danish SPF SUS health program
- 37,000 pure-bred sows, of which 25,000 are in Denmark
- More than 100 years of breeding experience





Facts about Roslin Technologies

- An animal biotechnology company
- Established by the University of Edinburgh as the commercial arm of the Roslin Institute
- Edinburgh University were conducting breeding studies in the early 1900
- The Roslin institute was established in 1993
- Builds on more than 100 years of research into animal breeding, biotechnology and veterinary science
- More than 500 researchers and geneticists
- Research generating a total economic benefit to industry in excess of DKK 2.6 billion every year.
- Vast Experience in developing and bringing new technological breakthrough to industry.
- Solid foundation in genetic evaluation, genomic analysis and breeding programs
- One of the world's leading organisations in genetics, genome selection, animal biotechnology and veterinary science.
- Some Important research results:
 - o Numerous leading publications on genetic, genomic, and veterinary breakthroughs
 - Mapping of the pig's genotype and creation of a reference genome
 - Development of gene-editing technologies leading to greater understanding of genome function particularly in relation to disease resistance and production efficiencies.
 - With the help of genome selection and functional changes, animals have been bred for resistance to specific Swine diseases including PRRS.
 - o First in the world to clone a mammal with cells from an adult animal (Dolly the sheep).
 - Greater understanding of stem cells technologies including extraction and their role in animal breeding.
 - Production of surrogate animals that cannot produce own gametes that can be bred using stem cells from elite animals to multiple with genetic integrity.
 - o Biobanking of DNA samples for future genomic research, analysis and pedigree forensics
 - Development of various genomic markers.

Additional information:

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