

Research alliance to improve aquaculture and livestock breeding

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The University of Edinburgh's Roslin Institute and Hendrix Genetics, a global leader in animal breeding, have established a research agreement to improve the sustainability of animal production.

Researchers will focus on driving innovations that lead to greater disease resistance in farmed animals and better [selective breeding](#) programmes.

Their goal is to reduce losses and improve welfare in the fish farming and livestock industries.

The agreement builds on existing collaborations in salmon disease genetics between the two organisations. The Roslin Institute already works closely with the salmon breeding company Landcatch, a Hendrix Genetics company based in Ormsary in Argyll, Scotland.

This collaboration has yielded the discovery of a gene that makes salmon more resilient to a viral disease. It has also led to the development of genetic tools that have improved selective breeding for resistance to sea lice.

Scientists at the Universities of Stirling and Glasgow, as well as the University of Edinburgh's sequencing facility Edinburgh Genomics, were also part of the research team that led to these discoveries.

The [strategic partnership](#) between Hendrix Genetics and The Roslin Institute will strengthen and extend their relationship. It will allow them

to explore precision breeding technology, not only in aquaculture, but also in pig, chicken and turkey breeding.

Dr Johan van Arendonk, Chief Innovation and Technology Officer at Hendrix Genetics said "This partnership with Roslin - a world leading research institute - offers a unique opportunity to improve our breeding programs through applied research projects using the latest genomic technology."

Professor Bruce Whitelaw, Deputy Director and Head of the Division of Developmental Biology at The Roslin Institute, said "We are excited about building on our long-term relationship with Landcatch through establishing this strategic partnership. Working with Hendrix Genetics across a number of commercial species offers exciting opportunities for the science that Roslin pioneers."

Dr Ross Houston, a group leader in aquaculture genetics at Roslin, said "This is an exciting development which will allow us to build on past successes with Hendrix Genetics Aquaculture, and facilitate new projects to improve disease resistance in salmon and other species through selective [breeding](#)."

Dr Alastair Hamilton, senior scientist at Hendrix Genetics, will split his time between the Roslin Institute and the Hendrix Genetics as part of this partnership.

The Roslin Institute receives strategic funding from the Biotechnology and Biological Sciences Research Council.

Provided by University of Edinburgh

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