Genus and Caribou Biosciences Announce Exclusive Collaboration for Leading CRISPR-Cas9 Gene Editing Technology in Livestock Species

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BERKELEY, Calif. -- May 18, 2016 -- Genus plc (LSE: GNS) (“Genus”), a global pioneer in animal genetics, and Caribou Biosciences, Inc. (“Caribou”), a leader in the revolutionary field of CRISPR-Cas gene editing, are pleased to announce a multi-year strategic collaboration where Genus receives a worldwide, exclusive license to Caribou’s leading CRISPR-Cas9 gene editing technology platform in certain livestock species. This is a significant move for Genus and marks the largest technology-driven alliance that Genus has made to date. The partnership positions Caribou at the forefront of an emerging market for which CRISPR-Cas9 could have profound benefits to animal welfare and society.

Caribou's market-leading CRISPR-Cas9 technology accurately targets and cuts DNA to produce precise and controllable changes to the genome. This partnership further strengthens Genus' leadership in applying gene editing technology to improve animal health and well-being. It will provide Caribou with opportunities within the animal genetics space and offers a novel gateway to apply its technology to help improve the welfare of food-producing animals.

The agreement gives Genus exclusive access to Caribou’s CRISPR-Cas9 technology for the development of new traits in pigs, cattle and potentially other livestock species. In addition to an upfront payment, Caribou is eligible to receive regulatory and commercial milestone payments as well as royalties on licensed product sales from Genus. Additional terms of the agreement were not disclosed.

Caribou and Genus will collaborate during a four-year research program, funded by Genus, which may be extended for an additional three years. Among the first targets of the program will be the further development and optimization of Genus’ Porcine Reproductive and Respiratory Syndrome Virus (“PRRSv”) resistant pigs, the discovery of which was announced by Genus in December 2015.

PRRSv is a devastating disease that can cause persistent infection in pigs and lead to reproductive failure, reduced growth, and premature death. There is currently no cure for the disease, which causes the suffering or death of millions of pigs and piglets each year.

Gene editing with CRISPR-Cas9 technology allows precise changes to be made in the genome of an animal without introducing genetic material from another organism. In the case of the PRRSv resistant pigs, a small change can be made to inactivate a single pig gene that produces a protein, known as CD163, which the PRRS virus requires for infection to occur. The gene editing technology used to create protection from PRRSv does not involve transplanting genes from one species to another.

The strategic collaboration and license agreement will enable the acceleration of multiple research and development projects across Genus’ bovine and porcine businesses. Additionally, Genus has invested $5 million in Caribou’s recently completed Series B equity funding round. The decision to partner with, and invest in, Caribou reflects Genus’ continued aim to be a global pioneer in animal genetic improvement to help nourish the world.

Speaking about the collaboration with Caribou, Dr. Jonathan Lightner, Chief Scientific Officer and Head of R&D of Genus, said:

“This latest investment into genome editing ensures Genus will remain at the forefront of the development and application of technology to support the well-being of livestock. Caribou’s CRISPR-Cas9 gene editing platform and its unique skills are significant to Genus as they provide the capabilities necessary to achieve the next stage of our PRRSv and other gene editing pipeline programs. This relationship will enable new and exciting research opportunities that will strengthen and accelerate Genus’ gene editing capabilities. We look forward to working closely with the Caribou team.”

Dr. Rachel Haurwitz, President and Chief Executive Officer of Caribou said:

“We are delighted to have entered into this collaboration with Genus, a leader in the animal genetics industry. We look forward to working collaboratively with Genus to apply our CRISPR-Cas9 technology platform to help improve animal health. We believe this partnership validates our leadership in the CRISPR-Cas technology field and exemplifies a key component of our strategy to work with world-class partners who are aligned with our vision to deploy the technology in responsible and ethical ways to solve important problems in healthcare, agriculture, and industrial biotechnology. Genus is clearly such a partner.”

This announcement and more information about Genus and Caribou are available on the Genus website (www.genusplc.com) and the Caribou website (www.cariboubio.com), respectively.

About Genus plc

Genus is headquartered in Basingstoke, United Kingdom and is a world-leading pioneer in animal genetics. The company helps nourish the world through the responsible exploration of new technologies that benefit its customers, the well-being of livestock, and ultimately consumers. Genus’ subsidiary PIC is the global leader in providing genetically superior pig breeding stock and technical support for maximising genetic potential to commercial pork producers. Genus' customers' animals produce offspring with greater production efficiency, and quality, and use these to supply the animal protein supply chain. Genus companies operate in over 25 countries on six continents, with research laboratories located in Madison, Wisconsin.

About Caribou Biosciences, Inc.

Caribou is a developer of cellular engineering and analysis solutions based on CRISPR technologies located in Berkeley, California. The company was founded by pioneers of CRISPR-Cas biology based on research carried out in the Doudna Laboratory at the University of California, Berkeley. Caribou has generated substantial intellectual property around CRISPR systems and its applications. In addition, Caribou has in-licensed intellectual property from multiple entities including the University of California, the University of Vienna, and E.I. du Pont de Nemours and Company. “Caribou Biosciences” and Caribou’s logo are trademarks of Caribou Biosciences, Inc.

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