



Swine Cluster 4: Innovation for Sustainable Growth in the Pork Sector Priority Research Areas 2023-2028

Swine Innovation Porc is proud to announce the launch of Swine Cluster 4, a collaborative research program uniting industry, government, and academic partners around shared priorities from 2023-2028. Swine Cluster 4 will invest up to \$20.1 million in combined industry-government funding. The program is focused on fostering continued sustainability, resiliency, and growth in the Canadian pork sector.

Through this investment, we are building on Canada's brand and reputation as a leading global pork supplier, while strengthening environmental outcomes and enhancing productivity and competitiveness for the benefit of producers and processors across Canada.

The Swine Cluster 4 program was developed using a highly collaborative approach enabling a substantial research agenda targeting key industry priorities. The Swine Cluster's research agenda reflects the dynamic opportunities and challenges facing the Canadian pork sector in areas ranging from animal health and biosecurity, animal care, pork quality, and environmental sustainability.

In Canada's pork industry, the application of innovation and knowledge is central to enhancing productivity and competitiveness. By investing in the Swine Cluster, we continue to demonstrate our dedication to science-based decision-making, a key aspect of modern agriculture. Ultimately, this strategic investment will advance the sector's long-term sustainability, resilience, and growth.

Priority 1: Climate Change and Environment

The Canadian pork sector has a strong history of striving for sustainable profitability through more efficient production practices that do more with less. The research undertaken under Swine Cluster 4 will support the sector's commitment to enhancing the sustainability of Canadian pork production.

Projects will explore opportunities to reduce the environmental footprint associated with pork production through measures such as improving manure management practices (e.g. lowering methane and nitrous oxide), using feed formulations and dietary strategies that reduce phosphorus runoff and nitrogen concentration in manure, and implementing more efficient production systems and technologies. Environmental life cycle assessments and foundational data will play a key role in enabling and measuring sector progress over the long-term.

Priority 2: Sector Resilience

The Canadian pork industry's resilience depends on its ability to take proactive steps in responding to animal health priorities, ranging from disease pressures and biosecurity to our continued focus on best-practices for animal care. Investing in Canada's research capacity and expertise in this area will support the continuous improvement in the management and prevention of existing and emerging animal disease threats, while ensuring animals are in good health through proper care and treatment. Advancements in research that help reduce risks and strengthen productivity will drive greater profitability for the sector.

Priority 3: Economic Growth

The Canadian pork value chain supports over 103 thousand Canadian jobs and generates over \$24 billion in annual economic activity. This investment in Swine Cluster 4 builds on this important impact by supporting research projects designed to help increase the global competitiveness and economic growth of the sector. Research projects under this priority area will look at boosting feed utilization, enhancing pork quality, and creating new added value for Canadian pork products.

Priority 4: Communications and Knowledge and Technology Transfer (KTT)

Through Swine Cluster 4, KTT efforts on individual research projects will be facilitated. In addition, Swine Innovation Porc (SIP) will also lead a suite of initiatives, in collaboration with sector stakeholders, to drive awareness and adoption of practical research outcomes. Programming will include on-farm demos to be completed by our partners at the Prairie Swine Centre and the Centre de développement du porc du Québec. By strengthening networks and information sharing, Swine Cluster 4 will play a significant role in enhancing the Canadian pork sector's capacity to apply science-based solutions towards priority issues like sustainability, animal health and biosecurity, animal care, quality, and more.