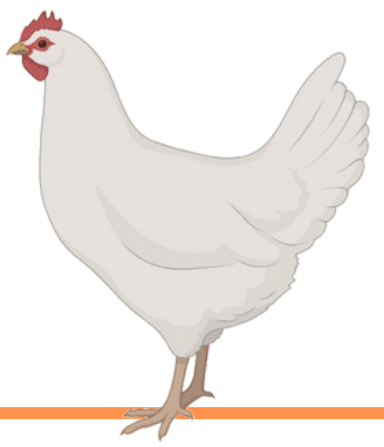


Avian Infectious Bronchitis: Viral Control with MiRNAs

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INTRODUCTION

Challenges for the poultry industry

- Chickens: reduction of meat conversion and mortality
- Hens: false layer syndrom

Problem

- Absence of an effective vaccine against IBV

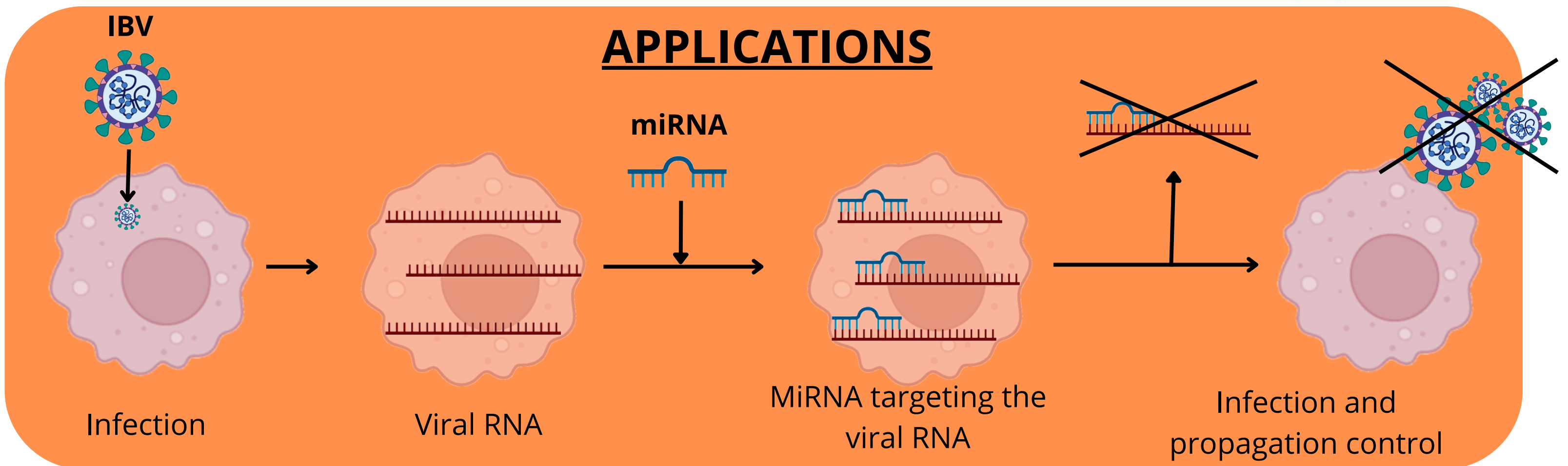
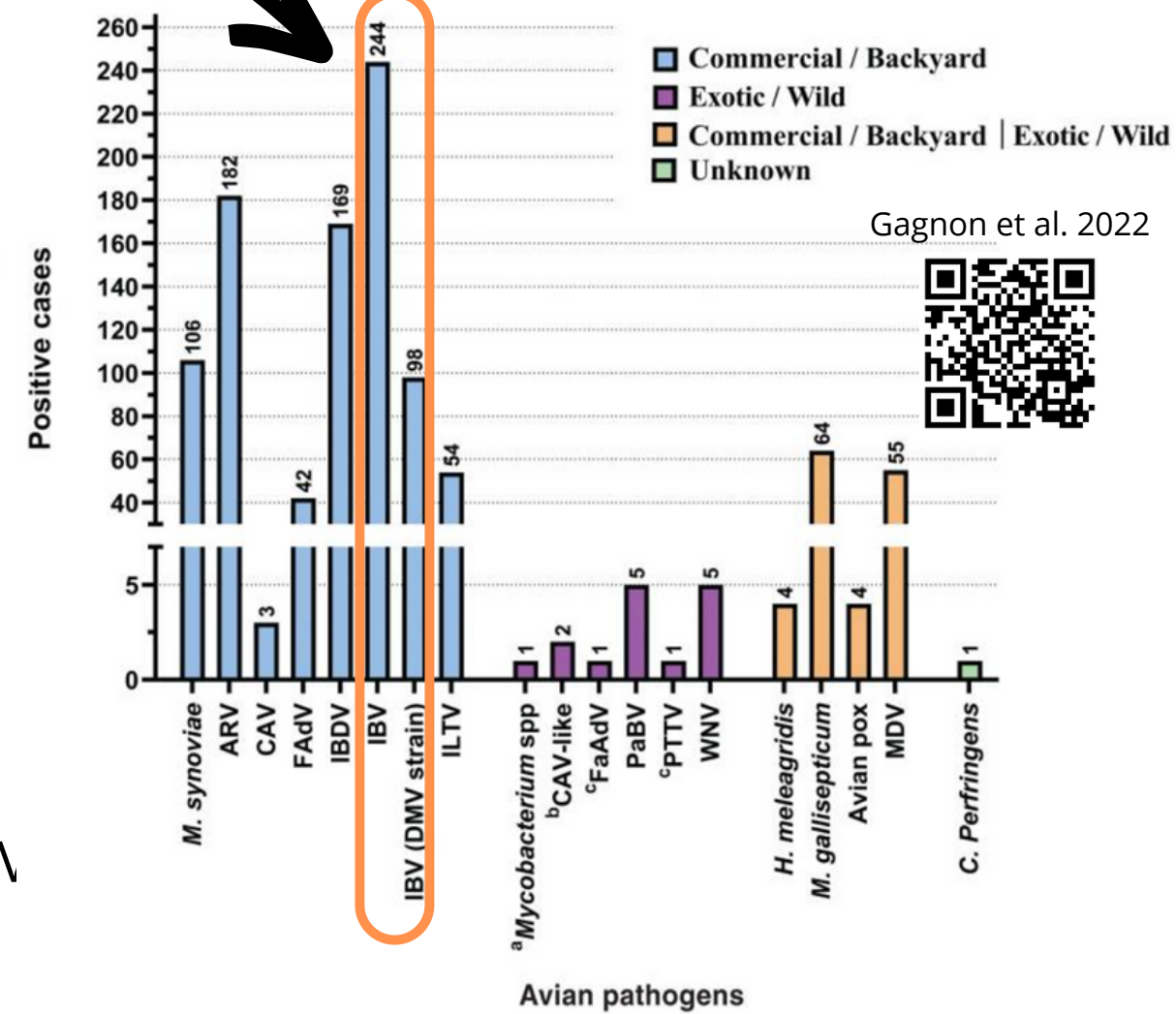
Hypothesis

- Selection of cellular miRNA with an effect on the viral cycle

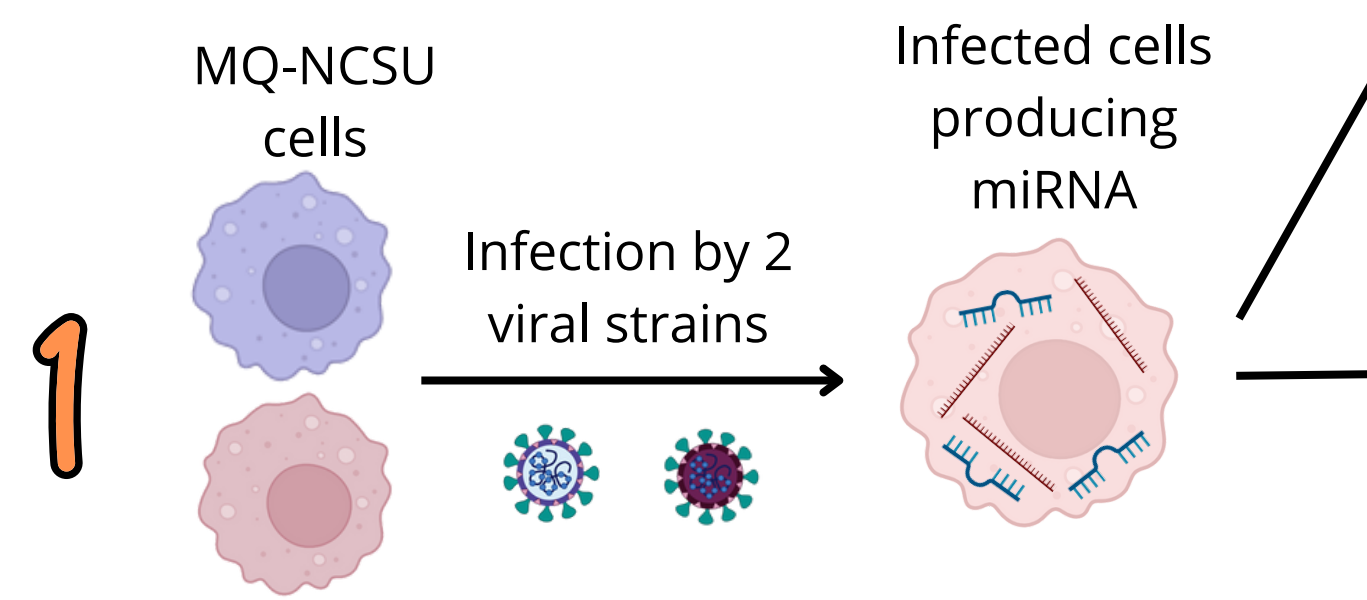
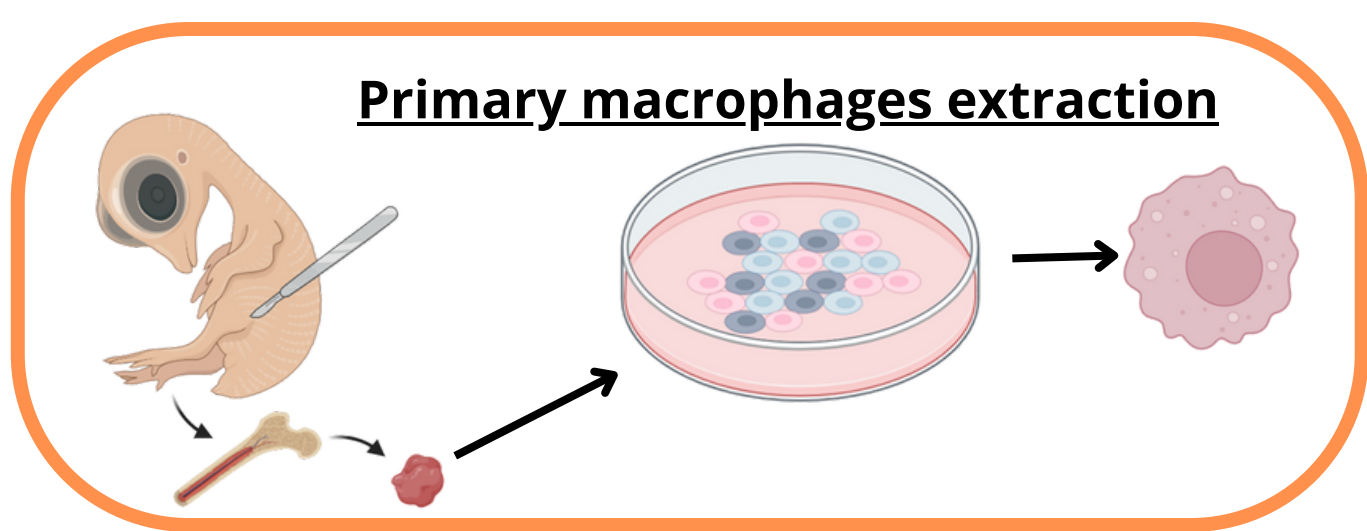
Project's objectives

- Selection of miRNAs modulated by infected cells
- Verifications of immune cells' effective functions in order to observe IBV immunosuppressive action

IBV = Avian pathogen most frequently found in diagnostic laboratories in Quebec



METHODOLOGY



MiRNA high-throughput sequencing
In order to identify differentially expressed miRNA, meaning miRNA sequences expressed during IBV infection with a potential impact on the viral cycle

Nitric oxide production assay
To make sure that immune cells are still able to kill pathogens

Phagocytosis assay
To make sure that immune cells are still able to internalize and present pathogens to the immune system

ACKNOWLEDGMENTS

