

Bee'omics



Project Update

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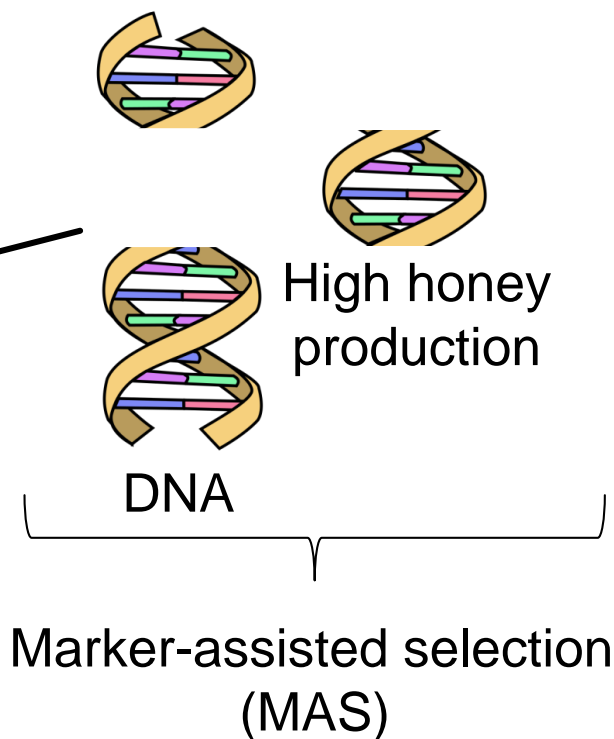


# What is the 'BEE 'Omics' about?

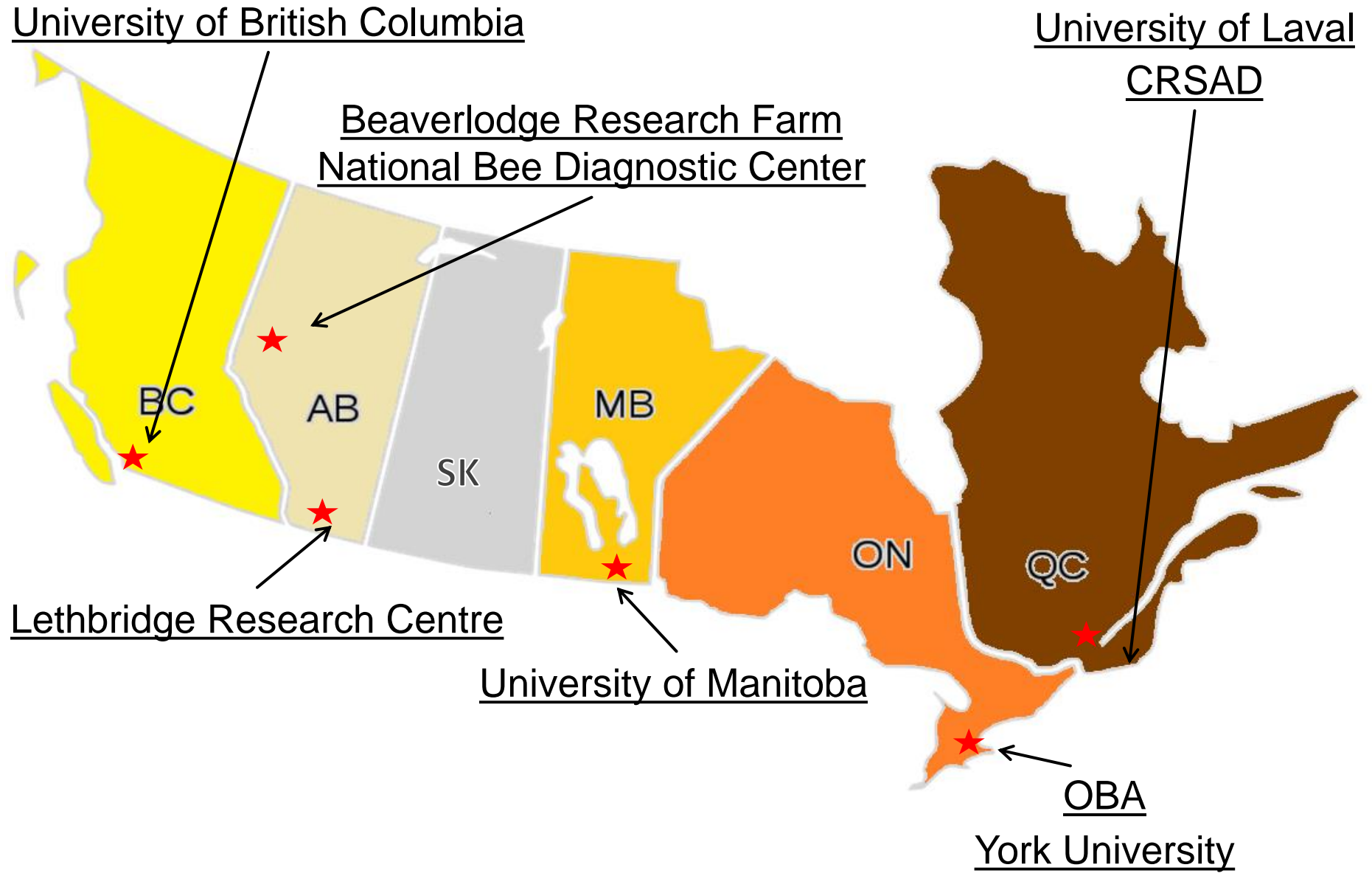
- Develop biological markers for 12 honey bee traits



Honey production

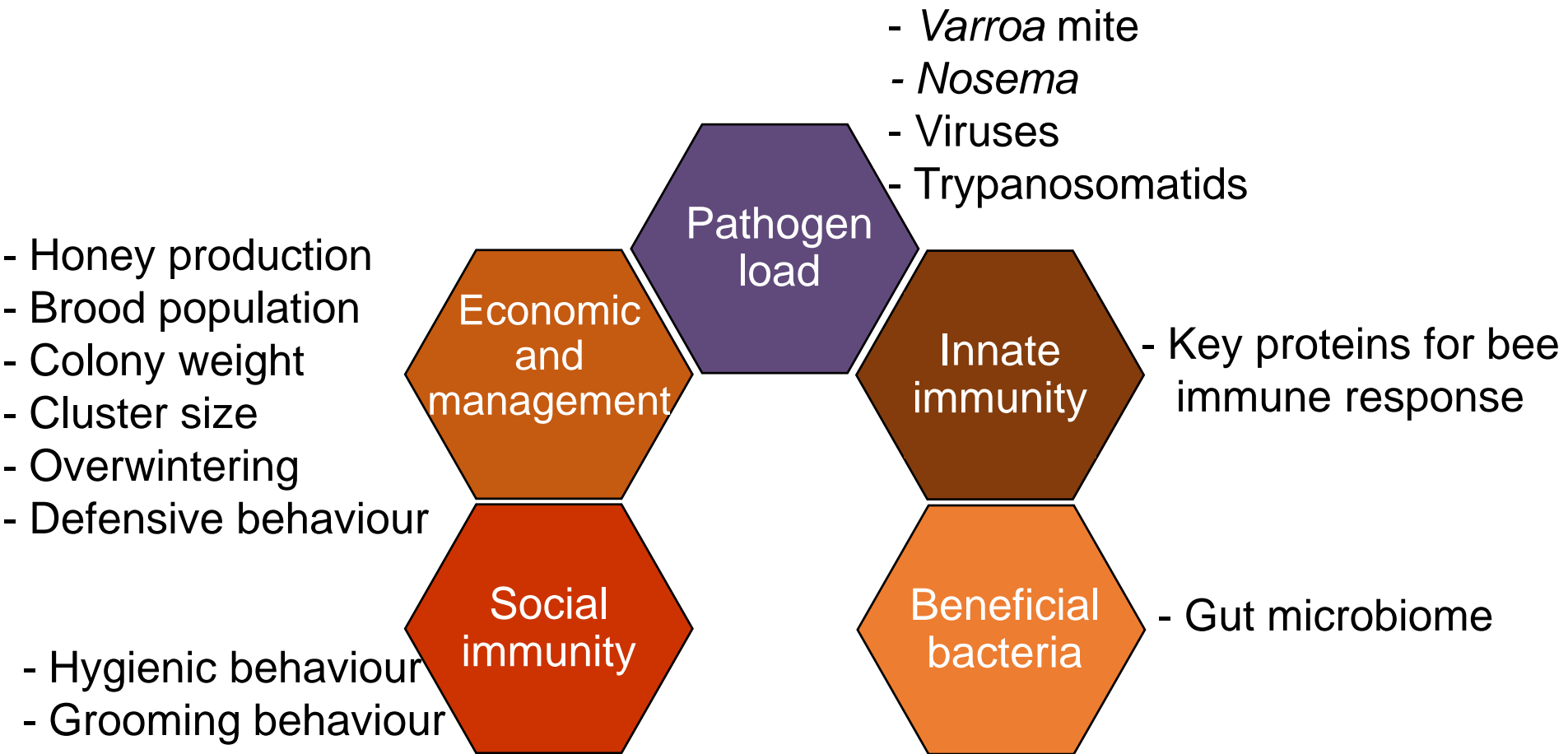


# Approx. 1000 colonies monitored across Canada



# Measuring economically-valuable traits in honey bees:

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# BEE 'Omics' objectives

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- Develop markers for 12 honey bee traits
- Develop markers to enable beekeepers to breed healthy and productive bee colonies using MAS



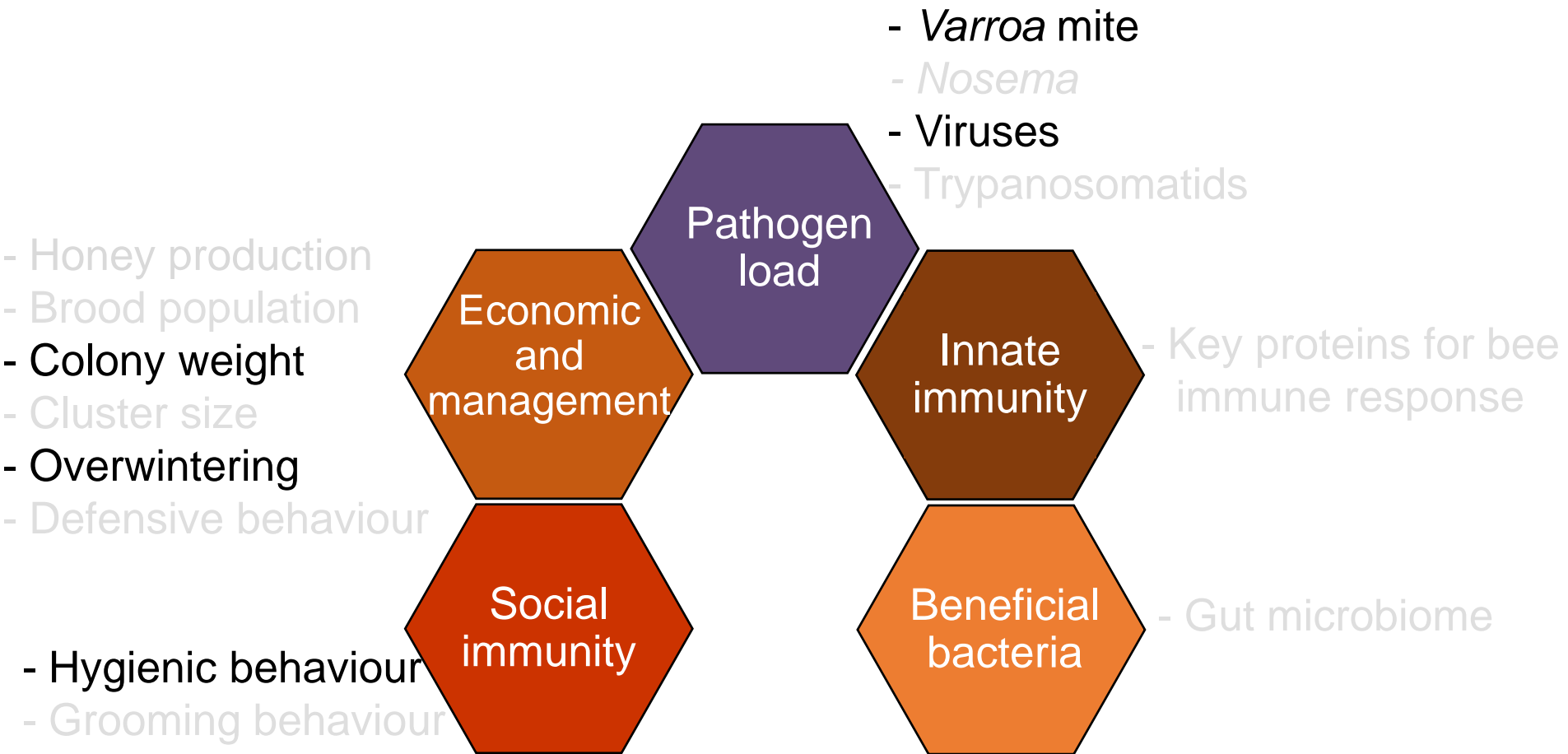
# BEE 'Omics' objectives

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- Develop markers for 12 honey bee traits
- Develop markers to enable beekeepers to breed healthy and productive bee colonies using MAS
- Study the correlation among colony phenotypes
- The effects of pathogen load on colony-level health traits and productivity
- Understand the importance of pathogens and parasites on colony winter mortality

# Measuring economically-valuable traits in honey bees:

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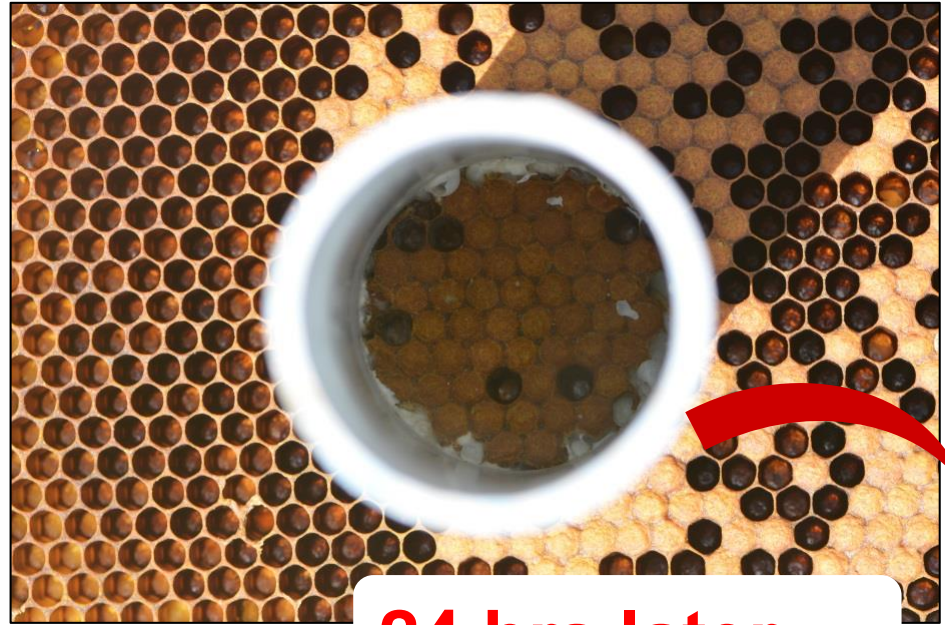
# Varroa Mite Population Growth



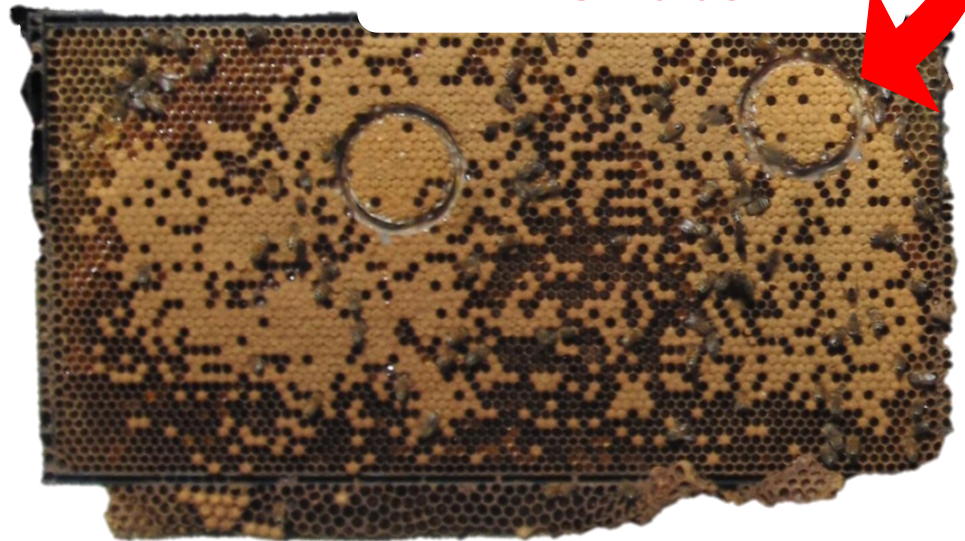
0.5 – 2%  
50 – 200 mites



# Hygienic Behaviour



24 hrs later....





# Fall and Spring Colony Weight

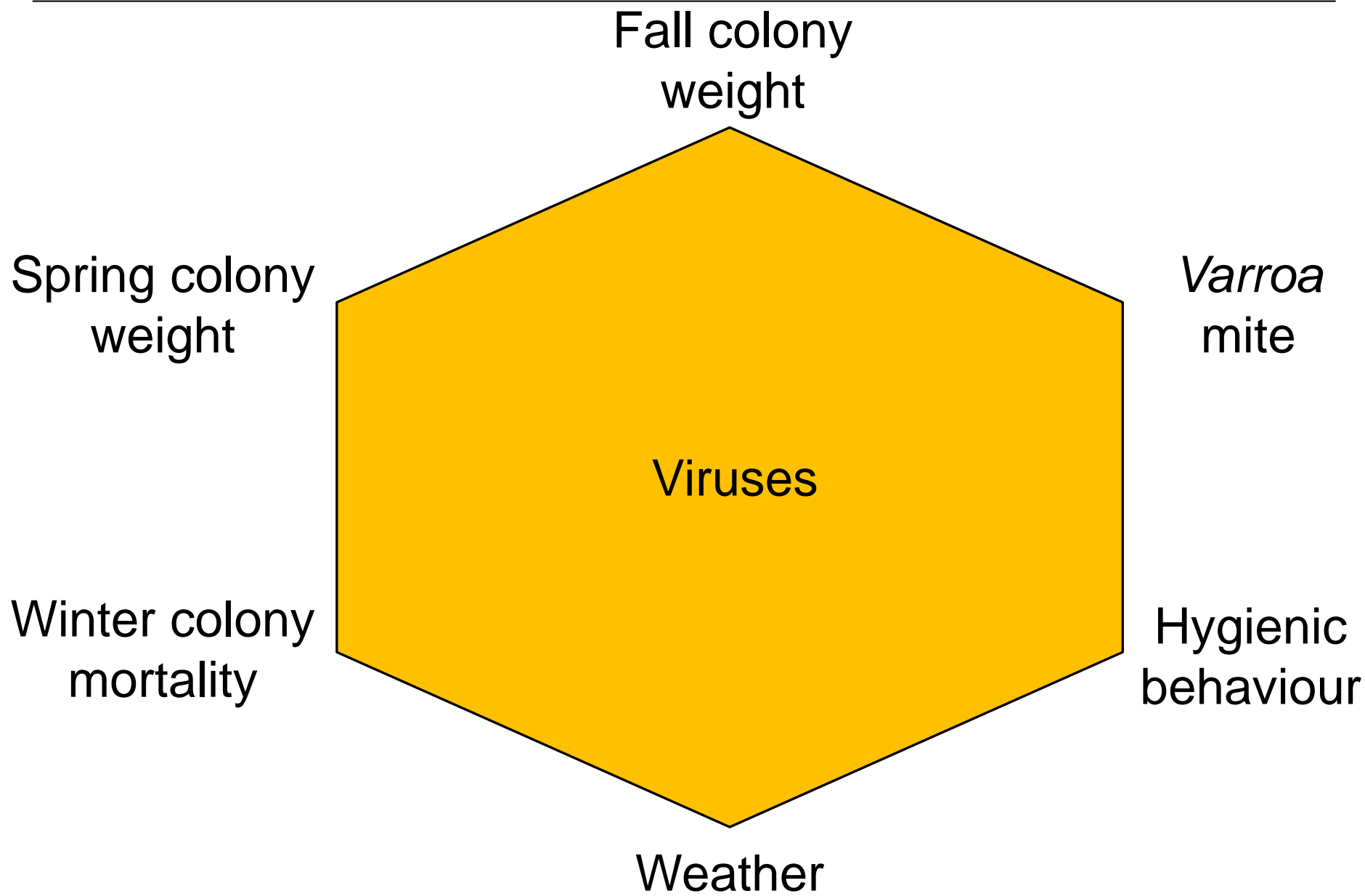
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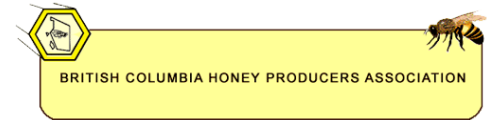
# Summary

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# Financial Support



Genome BC, Genome Alberta, Genome Prairie,  
Ontario Genomics Institute, Genome Quebec

