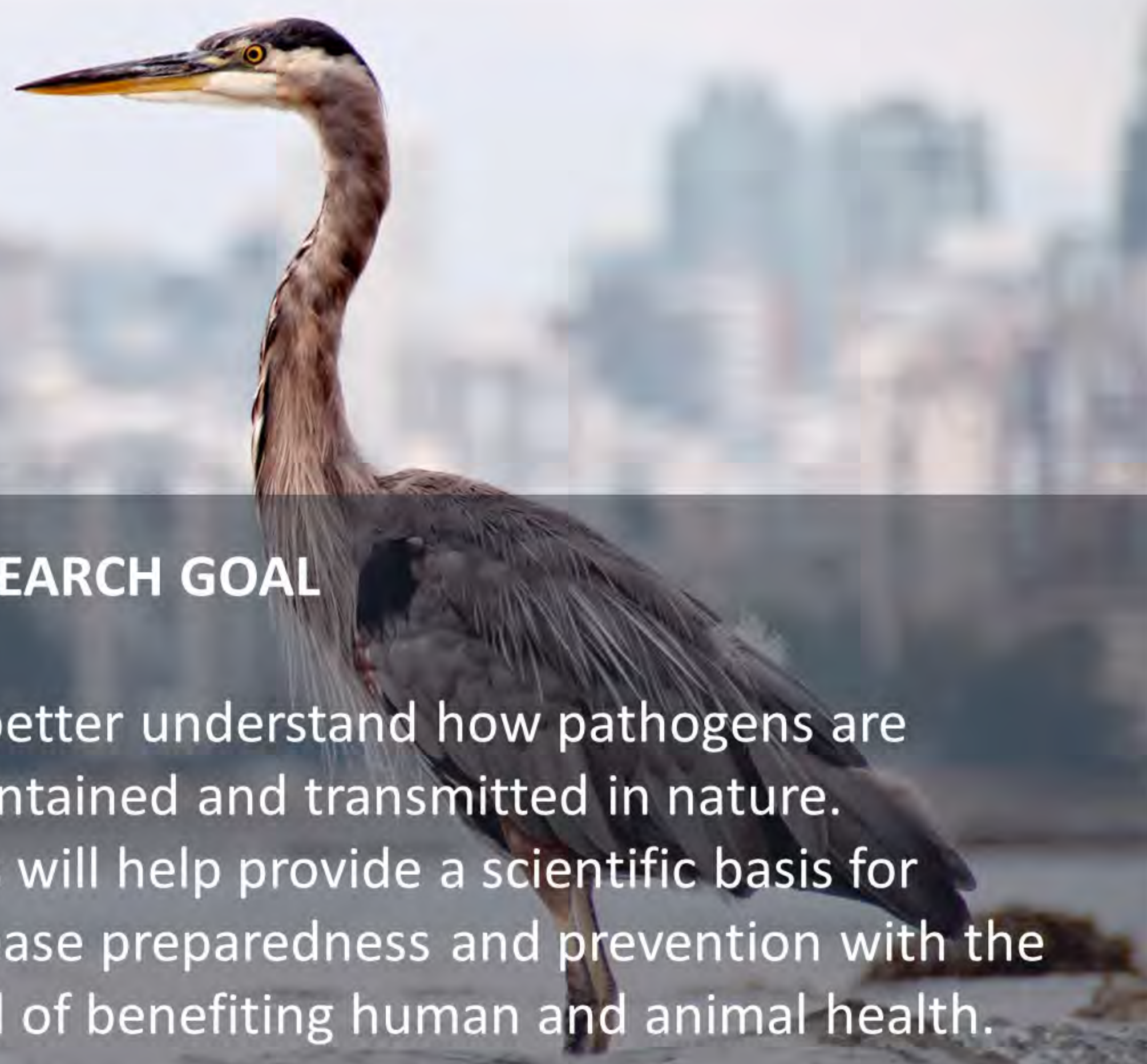


PATHOBIOLOGY RESEARCH PROJECTS IN  
**WILDLIFE DISEASE ECOLOGY**

## Researching the ecology of multi-host pathogens



### RESEARCH FOCUS

- Understanding the role of different wildlife hosts in maintaining and transmitting multi-host pathogens
- Understanding how biotic and abiotic factors affect the distribution of ticks and tick-borne pathogens.

### RESEARCH GOAL

To better understand how pathogens are maintained and transmitted in nature. This will help provide a scientific basis for disease preparedness and prevention with the goal of benefiting human and animal health.

## RESEARCH PROJECTS

### Role of wildlife in the transmission dynamics of zoonotic pathogens and impact of demographics and land use on prevalence of zoonotic pathogens in wildlife

Our group is investigating the impact of demographic and land use on the occurrence of zoonotic pathogens in wildlife hosts. We are currently investigating *Baylisascaris procyonis* in raccoons and *Echinococcus multilocularis* in both definitive and intermediate hosts.

Funded by: Bayer Animal Health, OAHN, CWHC.

### Ecology of ticks and tick-borne pathogens

Our group is investigating the impact of biotic and abiotic factors on the distribution and spread of ticks and tick-borne pathogens, including *Borrelia burgdorferi*, in Ontario. We are also looking at risk factors associated with tick and tick-borne pathogen carriage in domestic dogs.

Funded by: NSERC, OVC Pet Trust

### Role of wildlife in the ecology of enteric pathogens and antimicrobial resistance

Our group is investigating the role of wildlife, including small and medium sized wild mammals and Canada geese, in the maintenance and transmission of enteric pathogens, like *Salmonella* and *Campylobacter*, and antimicrobial resistance.

Funded by: OMAFRA Food Safety Research Program, USDA, NSERC

### Wildlife Health

We have developed and are now piloting a new wildlife health surveillance tool to augment ongoing wildlife health surveillance activities in Ontario [wildlifehealthtracker.com](http://wildlifehealthtracker.com)

Funded by: OMAFRA-University of Guelph Strategic Partnership, under the Disease Surveillance Plan, which is a joint federal-provincial Growing Forward 2 project, CWHC

