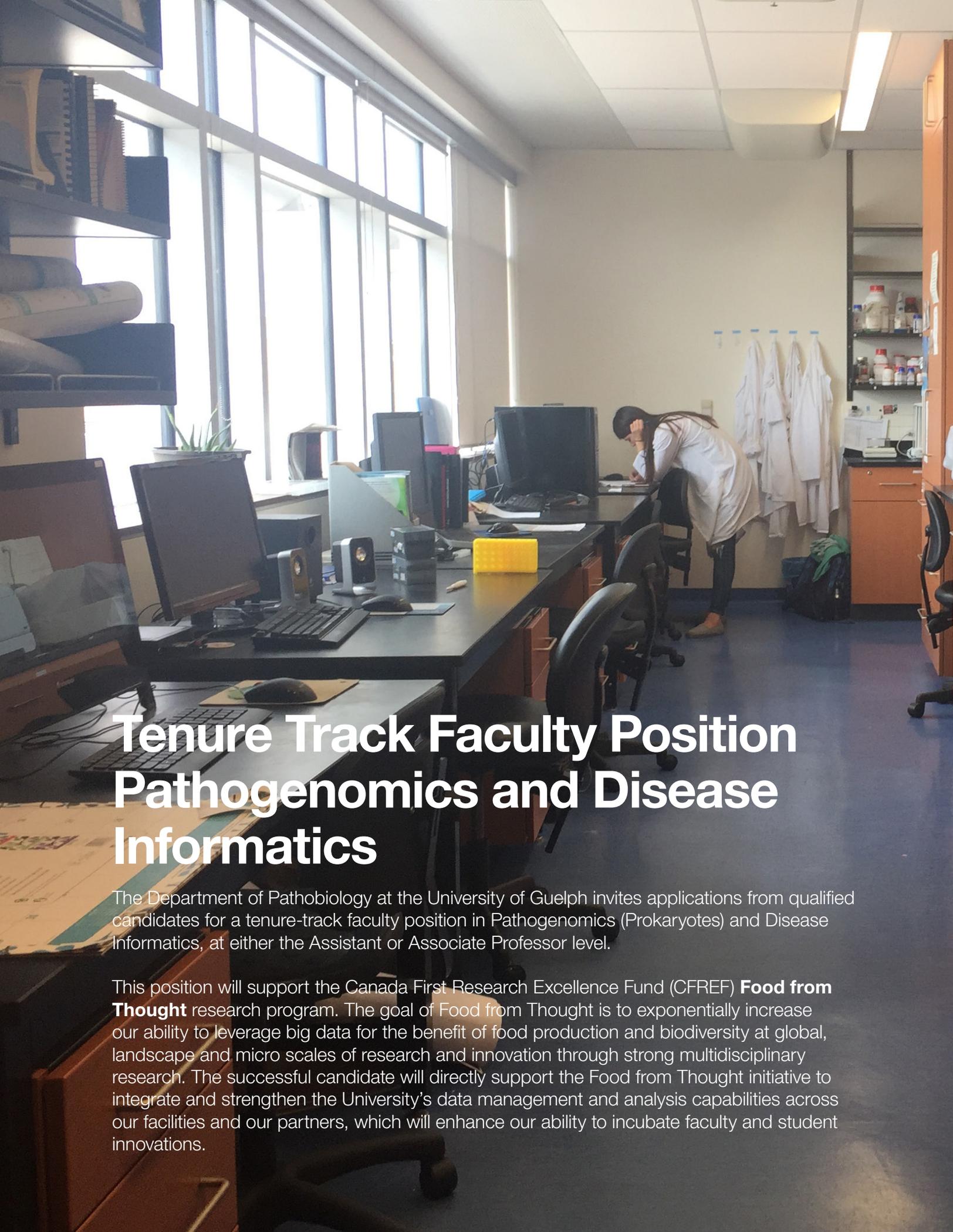


# DEPARTMENT OF PATHOBIOLOGY

Ontario Veterinary College  
University of Guelph

Pathobiology -  
Animal Health Laboratory



# Tenure Track Faculty Position Pathogenomics and Disease Informatics

The Department of Pathobiology at the University of Guelph invites applications from qualified candidates for a tenure-track faculty position in Pathogenomics (Prokaryotes) and Disease Informatics, at either the Assistant or Associate Professor level.

This position will support the Canada First Research Excellence Fund (CFREF) **Food from Thought** research program. The goal of Food from Thought is to exponentially increase our ability to leverage big data for the benefit of food production and biodiversity at global, landscape and micro scales of research and innovation through strong multidisciplinary research. The successful candidate will directly support the Food from Thought initiative to integrate and strengthen the University's data management and analysis capabilities across our facilities and our partners, which will enhance our ability to incubate faculty and student innovations.

The successful candidate will have a PhD in disciplines related to animal health and disease research, emphasizing prokaryotic pathogens, with extensive expertise and experience in applications of big data (including but not limited to transcriptomics, genomics, proteomics and metabolomics data) to decipher host-microbe relationships. Holding a Doctor of Veterinary Medicine in addition to a PhD and relevant post-doctoral experience will be an asset.

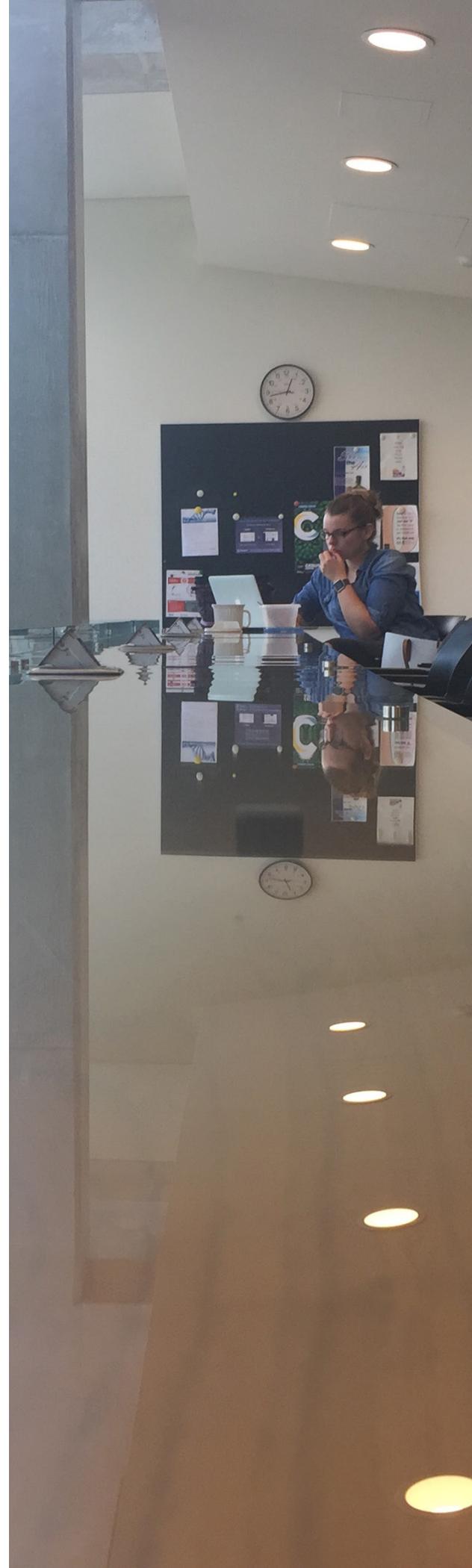
The successful candidate is expected to establish a strong independent research program at the interface of computational science and disease, and focused on finding solutions, using big data, for control of infectious disease and improving health and welfare in food producing animals. Applicants who have demonstrated a one health approach to addressing research questions are particularly encouraged to apply. The successful candidate will collaborate closely with other members of the Department of Pathobiology, faculty of the Ontario Veterinary College, as well as other faculty across the University of Guelph, especially those who will be hired as part of the Food from Thought initiative and those in our growing bioinformatics program.

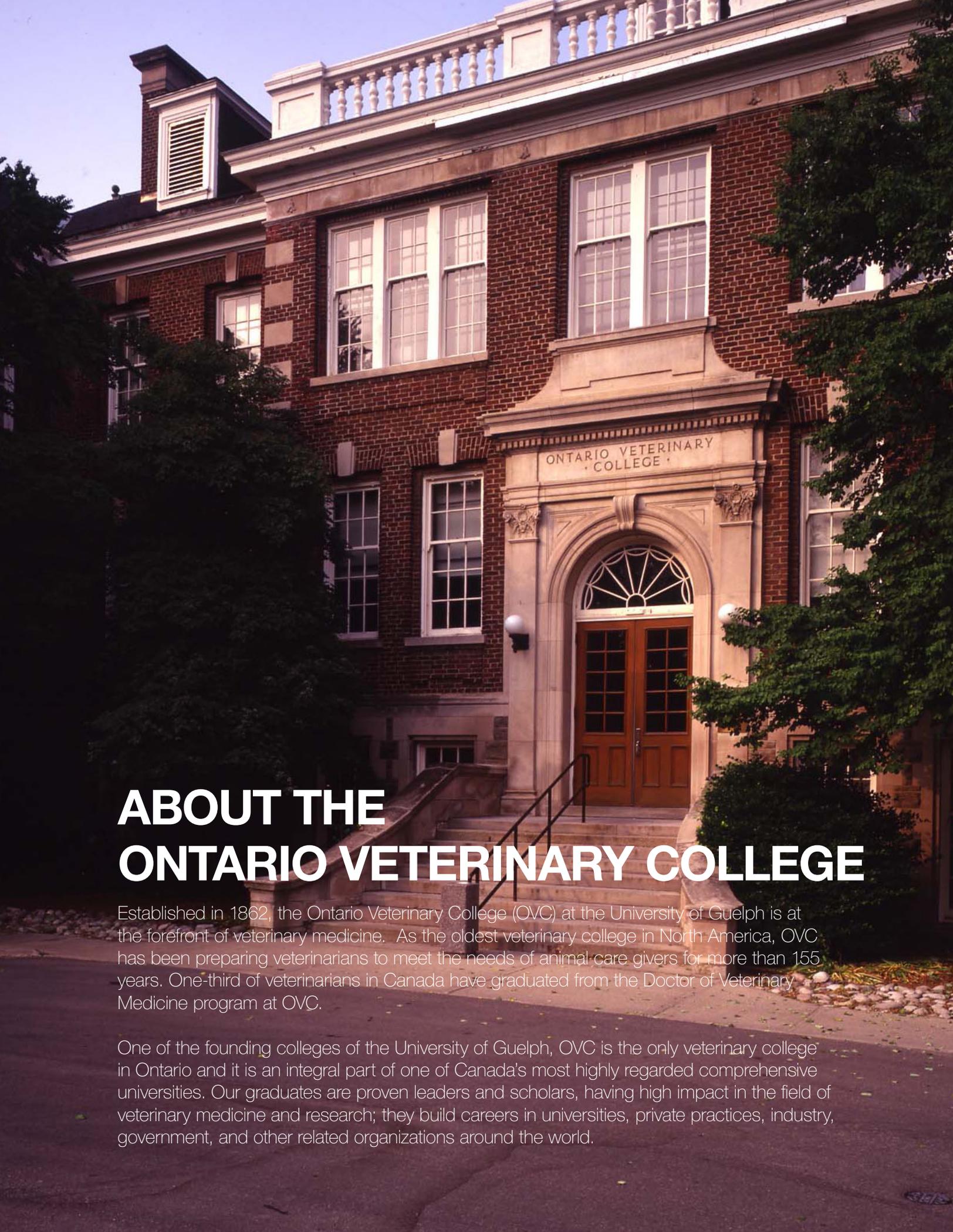
Salary and rank are negotiable and commensurate with experience and qualifications. The deadline for applications is January 15, 2017 or until the position is filled. Please send a complete curriculum vitae and three references to: Dr. Shayan Sharif, Interim Chair, Department of Pathobiology, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada N1G 2W1. Email: [shayan@uoguelph.ca](mailto:shayan@uoguelph.ca)

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

The University of Guelph acknowledges the Attawandaron people on whose traditional territory the University of Guelph resides and offer our respect to our Anishinaabe, Haudenosaunee and Métis neighbours as we strive to strengthen our relationships with them.

At the University of Guelph, fostering a culture of inclusion is an institutional imperative. The University invites and encourages applications from all qualified individuals, including from groups that are traditionally underrepresented in employment, who may contribute to further diversification of our Institution.



A photograph of the Ontario Veterinary College building, a three-story red brick structure with a prominent arched entrance. The entrance features a wooden double door with a fanlight window above it. The words "ONTARIO VETERINARY COLLEGE" are inscribed in stone above the arch. The building has several multi-paned windows and a balcony with a decorative railing on the top floor. Lush green trees and bushes are visible in the foreground and to the right.

# ABOUT THE ONTARIO VETERINARY COLLEGE

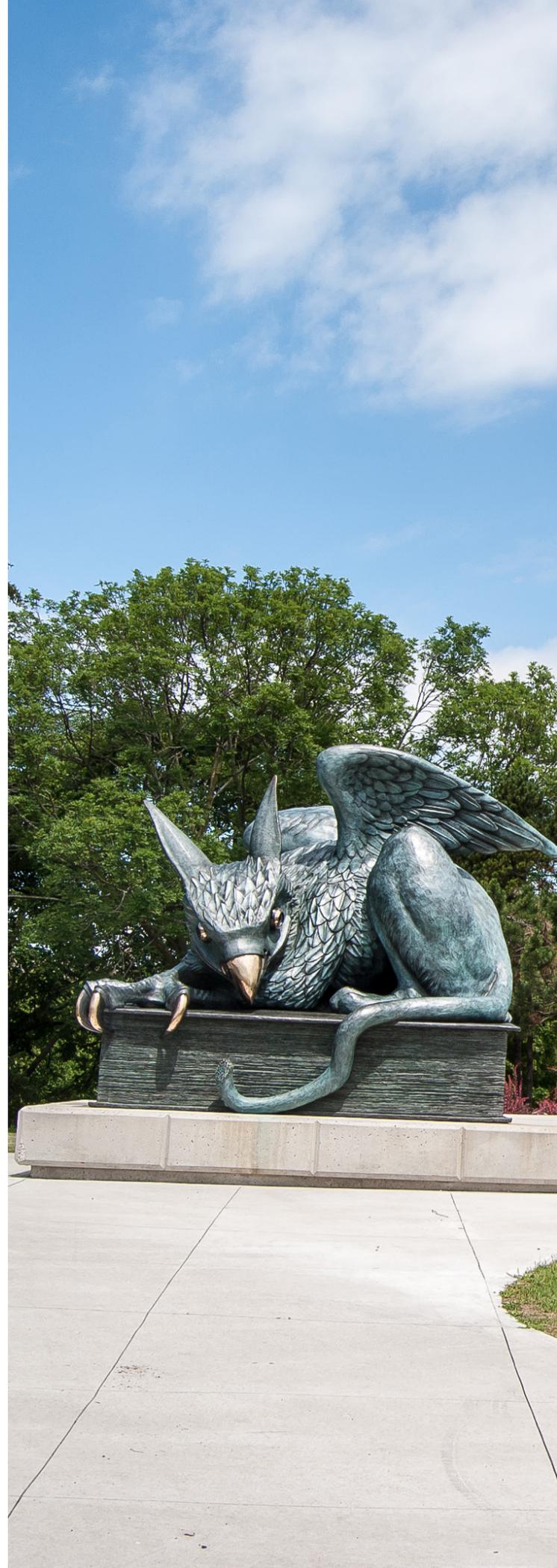
Established in 1862, the Ontario Veterinary College (OVC) at the University of Guelph is at the forefront of veterinary medicine. As the oldest veterinary college in North America, OVC has been preparing veterinarians to meet the needs of animal care givers for more than 155 years. One-third of veterinarians in Canada have graduated from the Doctor of Veterinary Medicine program at OVC.

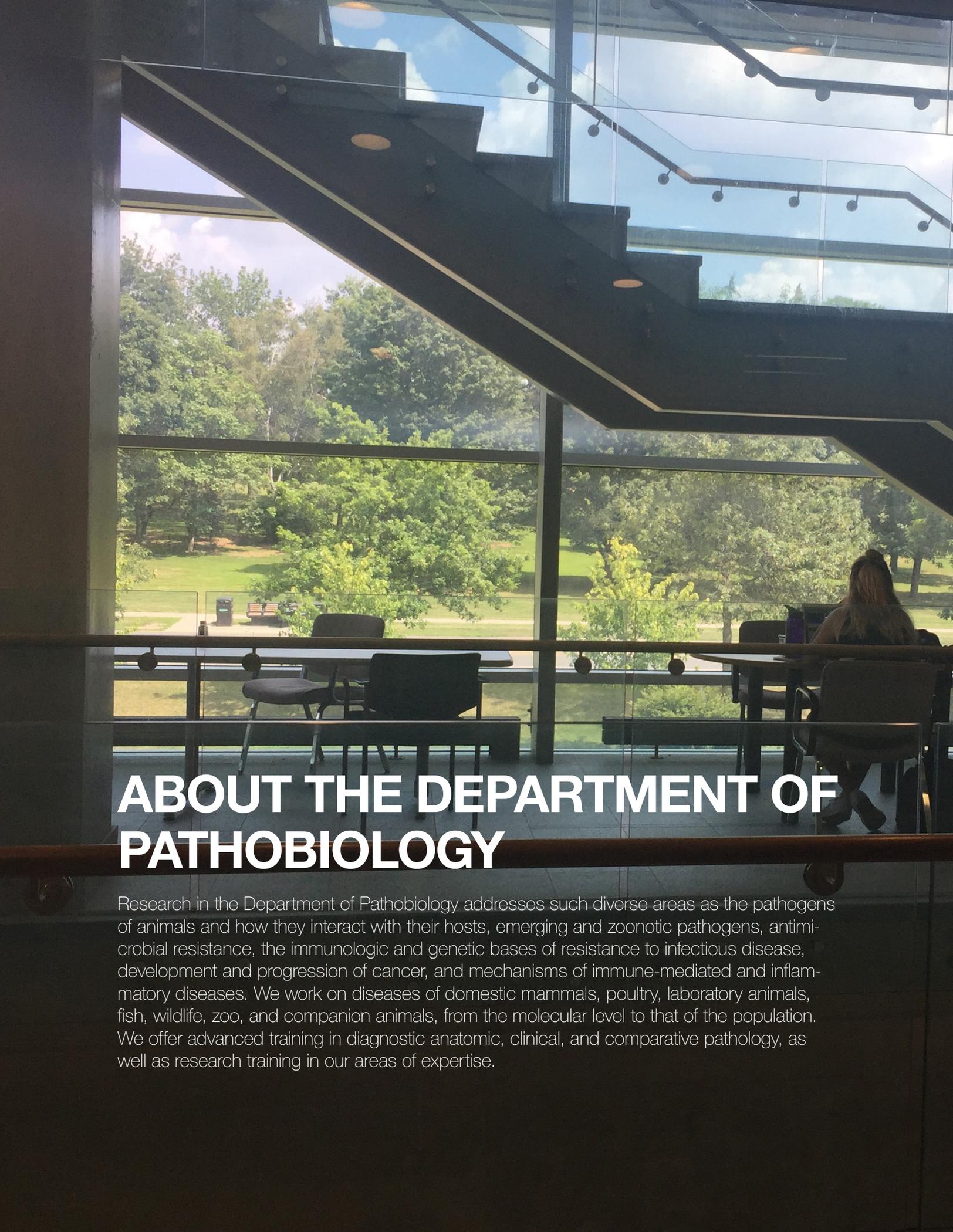
One of the founding colleges of the University of Guelph, OVC is the only veterinary college in Ontario and it is an integral part of one of Canada's most highly regarded comprehensive universities. Our graduates are proven leaders and scholars, having high impact in the field of veterinary medicine and research; they build careers in universities, private practices, industry, government, and other related organizations around the world.

As part of a top comprehensive university, OVC has a long history of solving complex health problems for both farm and companion animals. OVC is a fully accredited veterinary college and is ranked by Quacquarelli Symonds as first in Canada, third in North America and sixth in the world for veterinary science.

Today, the College is home to 116 faculty and veterinarians, as well as 183 regular full-time staff across four departments: Department of Biomedical Sciences; Department of Clinical Studies; Department of Pathobiology and the Department of Population Medicine; as well as the OVC Health Sciences Centre which houses the OVC Companion Animal Hospital; Large Animal Hospital; Isolation Unit; Hill's Pet Nutrition Primary Healthcare Centre and the Mona Campbell Centre for Animal Cancer.

The OVC is fully accredited by the Council on Education of the American Veterinary Medical Association (AVMA) and the Canadian Veterinary Medical Association (CVMA). Our educational programs include the four-year professional DVM degree; BSc degrees with other colleges in Bio-Medical Sciences and Toxicology; graduate programs for graduate diploma (GDip), MSc, Master of Public Health (MPH), Master of Biomedical Sciences (MBS), PhD, and Doctor of Veterinary Science (DVSc) degrees; clinical specialists-in-training programs; and the Summer Career Opportunities and Research Exploration Program for DVM and BSc students. Students educated through OVC learn a comparative, cross-species approach to diagnostics, epidemiology, and preventive medicine to provide comprehensive, global solutions.





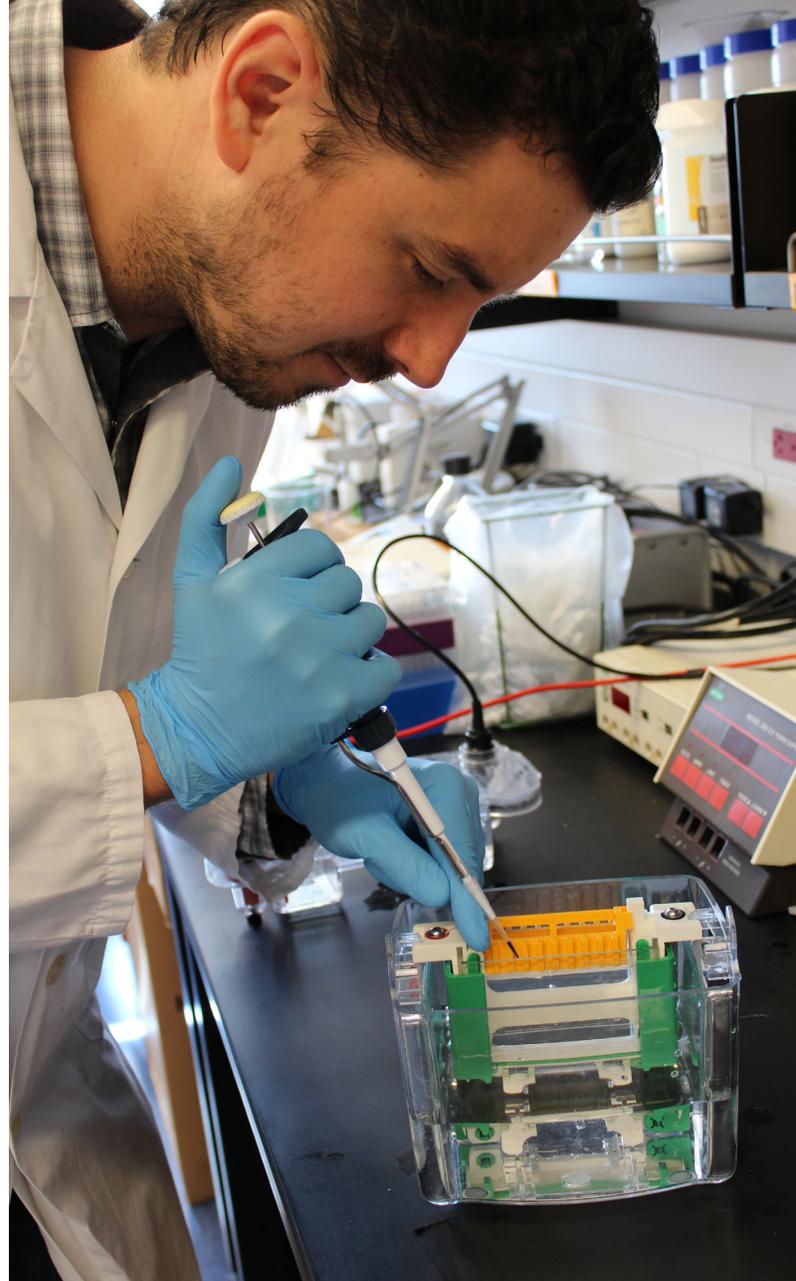
# ABOUT THE DEPARTMENT OF PATHOBIOLOGY

Research in the Department of Pathobiology addresses such diverse areas as the pathogens of animals and how they interact with their hosts, emerging and zoonotic pathogens, antimicrobial resistance, the immunologic and genetic bases of resistance to infectious disease, development and progression of cancer, and mechanisms of immune-mediated and inflammatory diseases. We work on diseases of domestic mammals, poultry, laboratory animals, fish, wildlife, zoo, and companion animals, from the molecular level to that of the population. We offer advanced training in diagnostic anatomic, clinical, and comparative pathology, as well as research training in our areas of expertise.

Presently, there are 24 faculty, 1 veterinarian, 42 staff members, and 98 graduate students who work in the new Pathobiology/Animal Health Lab building (built in 2010) located on the University of Guelph's main campus in the heart of the City of Guelph.

The building provides excellent opportunities for scholarly collaborations. It is well-equipped with shared laboratories and state-of-the-art equipment for flow cytometry, fluorescence microscopy, quantitative PCR, next-generation sequencing, 2D gel electrophoresis, laser capture microdissection, and tissue microarray.

The facility also houses a 120-seat lecture theatre, two 60-seat seminar rooms, and a 60-seat teaching laboratory as well as department offices, research laboratories and the University's Animal Health Laboratory.



## GRADUATE STUDIES

The Department of Pathobiology offers research-based MSc or PhD degrees to both veterinarians and non-veterinarians in all fields of study in the department. Veterinary specialty training is offered through DVSc and graduate diploma programs in anatomic pathology, clinical pathology, comparative pathology, laboratory animal science, fish disease, and zoo medicine/pathology.

Graduate students typically continue their career in a diversity of positions, including academia, the public sector in Canada (provincial and federal government) and abroad, private industry and laboratories, as well as in specialty practice.

# RESEARCH, TEACHING AND SERVICE

## **March 2017:**

25 Tri-council research grants - \$5,978,621

88 Research grants from other sources - \$11,242,166

98 graduate students (advisor or co-advisor in Pathobiology)

163 peer-reviewed publications (2015-16)

View research listing: <http://bit.ly/PathobiologyResearch>

## **Summary of teaching:**

Faculty in the Department of Pathobiology teach in over 30 veterinary, undergraduate and graduate courses, and are engaged in curricular development. Pathobiology faculty are frequent recipients of teaching awards.

## **Summary of professional involvement:**

Departmental faculty are highly engaged with their professional organizations and include the Editors-in-Chief of "Veterinary Pathology" and the "Canadian Journal of Veterinary Research", an Associate Editor of "Veterinary Immunology and Immunopathology", and the Presidents elect of the American College of Veterinary Pathologists and the World Veterinary Association.

# PARTNERSHIPS

Faculty within the Department of Pathobiology play key roles in a number of strategic initiatives at the University of Guelph including the:

**Animal Health Laboratory** partners with the faculty in the Department of Pathobiology as the laboratory of choice for government and universities in Canada, for agriculture, food safety, and animal health testing. As a partner, they provide high-value laboratory services to the private sector in selected markets.

**Canadian Wildlife Health Cooperative** was founded in 1992 and has four main objectives: health surveillance, education, research, and management. This group spans across Canada and researchers collaborate to address various health issues associated with the wildlife health population. The post mortem results are entered into a national database, which provides researchers the opportunity to track the spread of various diseases.

**Centre for Cardiovascular Investigations** has broad interests that span the spectrum of cardiovascular medicine and science with a goal of understanding the mechanisms behind heart disease and to develop new therapies for the treatment of cardiovascular disease.

**Centre for Public Health and Zoonoses (CPHAZ)** was established in 2006 to recognize and build on the strong tradition of public health research and education at the University of Guelph. The role of CPHAZ is to coordinate existing public health research at the University of Guelph, create and support working relationships between researchers across disciplines, and advance education related to zoonoses and public health.

**Institute for Comparative Cancer Investigation**, which was launched in 2007, has the mission to broaden the scope of research and deepen our understanding of cancer. Collaborative researchers with the Institute span eight departments across the University including cancer biologists, veterinarians, chemists, mathematicians, computer scientists, toxicologists, psychologists, and others including from external organizations like the University of Waterloo and the University of Toronto.

**Poultry Health Research Network**, which is a multifaceted network of **38 experts** who collaborate to solve basic and applied issues related to poultry health, production and welfare, as well as industry-relevant issues relating to the environment, food safety, and outreach.

**Toronto Zoo** collaborates closely with the Department of Pathobiology through its graduate program in Zoological Medicine and Pathology. The Doctor of Veterinary Science program is a clinical doctoral program unique to the OVC.

A photograph of the University of Guelph building, a large stone structure with a prominent clock tower, situated on a hill. The building is partially obscured by dense green trees. The sky is blue with scattered white clouds. In the foreground, there is a grassy area, a sidewalk, and a road with a street lamp.

**“We have the opportunity and responsibility to improve the lives of individuals, our communities and the world around us. That’s important. That’s exciting. Let us take what is best about the University of Guelph and share it around the world.”**

~ President Franco Vaccarino.

# UNIVERSITY OF GUELPH

When you are building an academic career, you want to be part of an educational institution that values both your unique expertise and your personal aspirations. Many scholars and researchers have found those qualities at the University of Guelph in addition to high-quality and diverse programs, exceptional faculty colleagues, talented students, and the academic reputation that make Guelph one of the top comprehensive universities in Canada.

Located in southwestern Ontario about an hour's drive from Toronto, Guelph is a university with long traditions and ambitious goals. We are leaders in advancing healthy animal and human systems, environmental sustainability, biodiversity, and food and water quality. Few institutions in the world have such a deep understanding of the life sciences or how commerce and culture have impacted our concept of life.

Guelph also has a reputation for excellence in teaching and is the only Canadian university designated as a national centre for advancing supplemental instruction. In the annual University Report Card survey, which appears in the Globe and Mail, students routinely give Guelph "straight A's" for overall quality of the educational experience and for student services.

All of this makes for a dynamic and exciting academic and learning environment at the University of Guelph.

Learn more: [www.uoguelph.ca/facultyjobs](http://www.uoguelph.ca/facultyjobs)



IMPROVE LIFE.

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