



# PhDs With Impact

## OAC's Doctoral Destinations

Project  
Overview

UNIVERSITY  
of GUELPH

ONTARIO  
AGRICULTURAL COLLEGE

# Pursuing a PhD in OAC is a decision to pursue a PhD with impact, and to become an inspiring leader committed to improving life.

PhD graduates from the Ontario Agricultural College (OAC) are making an impact in food, agriculture, communities and the environment. With a strong demand for highly skilled graduates, OAC's doctoral alumni are well positioned for inspiring and innovative careers.

This study of OAC's PhD professional destinations illustrates the diverse career potential of an OAC PhD by showcasing the employment data of PhDs who graduated over a 20 year period.

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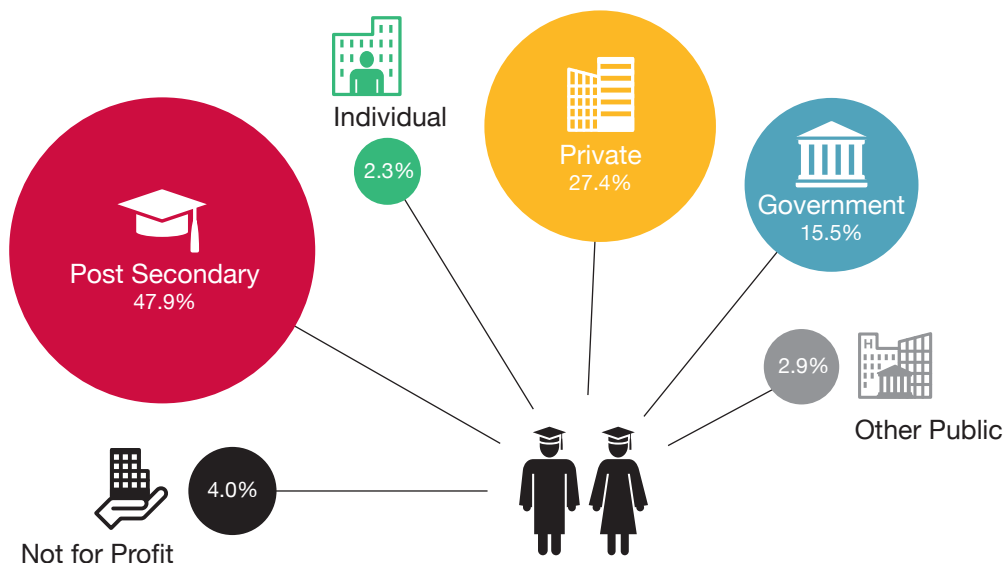
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# Executive Summary

PhD graduates from the University of Guelph's Ontario Agricultural College (OAC) have found career success in diverse fields, illustrating the value of a PhD in all sectors (academic, government, other public, not for profit, private and individual).

The OAC Doctoral Destinations Project documents the career status of graduates from OAC's PhD programs from 1999 to 2019. Data was collected using public information about employment sectors, job categories, and job titles of OAC doctoral alumni. During this 20-year period, OAC had 748 PhD students graduate. A census of their occupation in 2018-2019 was completed for 653 of these PhD alumni.

This report summarizes the census results of the OAC Doctoral Destinations Project. Data analysis indicates that PhD graduates found successful careers in all employment sectors: Academic, Private, Government, Not for Profit, Other Public, and Individual. This wide representation demonstrates the multifaceted skill set of PhD graduates and the need for, and applicability of, those skills outside of the traditional academic career path.



 Circles sized according to number of graduates

## Career Destinations of OAC Doctoral Graduates

2018-2019 by Employment Sector.



Study Numbers:

**20**

year period  
analyzed



**653**

PhD graduates  
in the census

**87%**

of PhD graduates  
were located for  
the study

# Who is OAC?

The Ontario Agricultural College is recognized domestically and internationally for its expertise in food, agriculture, communities and environmental sciences. Established in 1874, OAC is a founding college of the University of Guelph. It has two campuses in Guelph and Ridgetown, Ontario, and research activities are supported and strengthened by a province-wide network of field stations and research facilities.

**The OAC Community has a strong shared purpose: to improve life by inspiring leaders, generating knowledge and creating innovative solutions for food, agriculture, communities and the environment.**

University of Guelph's outstanding performance in domestic and international rankings reflects OAC's expertise and commitment to using science, ingenuity and a passion for plants, animals, people and the land to enhance scientific understanding and improve life.



**#1 in Canada and #13th in the world for food sciences and technology\***



**#1 in Canada and #12 in the world for agricultural sciences\*\***



**#2 in Canada and #49 in the world for plant and animal science\*\***



**#3 in Canada and #50 in the world for environment/ecology\*\*\***

Sources:

\* [www.shanghairanking.com/rankings/gras/2020/RS0219](http://www.shanghairanking.com/rankings/gras/2020/RS0219)

\*\* [admission.uoguelph.ca/rankings](http://admission.uoguelph.ca/rankings)

\*\*\* [www.shanghairanking.com/rankings/gras/2020/RS0106](http://www.shanghairanking.com/rankings/gras/2020/RS0106)



**The OAC community includes:**

**741**

OAC graduate enrollments

(largest population of grad students in the university)

**237**

PhDs enrolled

**1,529**

PhD alumni

**147**

faculty

## Academic Units

OAC is comprised of six academic units:



### Department of Animal Biosciences

Focuses on the ethical and sustainable production of food, and other animal products, that improve the health and well-being of people. Graduate training focuses on basic and applied science related to the feeding, breeding, housing and care of animals used by humans.



### Department of Food, Agricultural and Resource Economics

Focuses on the economics of the food system and bringing research discoveries to bear on relevant policy issues. Graduate training focuses on emphasizing the application of contemporary theories and state-of-the-art methods to support evidence-based policy decision making.



### Department of Food Science

Combines microbiology, sensory analysis, biochemistry, chemistry, physics and engineering to enhance the quality, safety, functionality and nutrition of foods. Graduate training focuses on food safety, quality, sensory analysis, preservation, packaging and function.



### Department of Plant Agriculture

Applies plant biology in an interdisciplinary research environment focused on agronomy, horticultural science and turfgrass crops. Graduate training has four areas of focus: plant genetics and breeding, plant physiology and biochemistry, crop production systems, and bioproducts.



### School of Environmental Design and Rural Development

Brings together academic fields concerned with creating strong communities: landscape architecture, rural planning and development, and capacity development and extension. Graduate training focuses on building communities where everyone plays an interdependent role.



### School of Environmental Sciences

Integrates the life and physical sciences to address important environmental problems in forest, aquatic and agro-ecosystems. Graduate training focuses on critical environmental issues and processes related to the lithosphere, atmosphere, hydrosphere and biosphere.



**MEET THE PROFS | Meet our Faculty in this video series**



# Who are our OAC PhDs?

Between September 1st, 1999 and August 31st, 2019, there were 748 PhD graduates from OAC's 4 departments and 2 schools.



School of Environmental Sciences, 26.5%



Department of Animal Biosciences, 21.5%



Department of Food Science, 19.9%



Department of Plant Agriculture, 16.6%



School of Environmental Design and Rural Development, 8.8%



Department of Food, Agricultural and Resource Economics, 6.7%



**54.7% male 45.3% female**

Gender proportion for all of OAC\*

\* Due to the limitations of available historical data, we regret that non-binary gender classifications are not reported in this study.

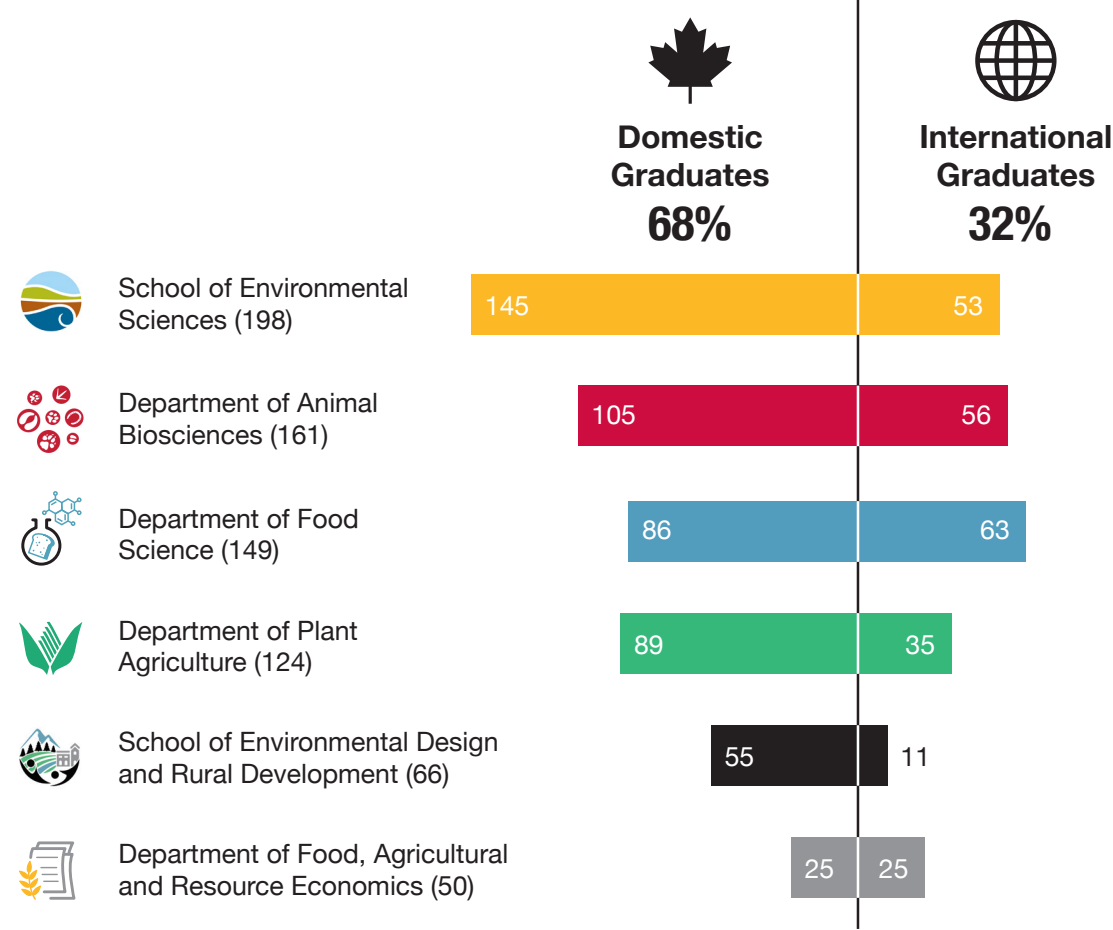
## OAC Doctoral Graduates by Academic Unit


748 Graduates, 1999-2019.

From 2010 to 2019, the proportion of international PhD students in OAC increased steadily from 25% to 32%. This increase in international enrolment demonstrates the value and applicability of the PhD skill set across countries and OAC’s prominent reputation on a global scale.

Immigration Status of Graduates by Academic Unit

748 Graduates, 1999-2019.



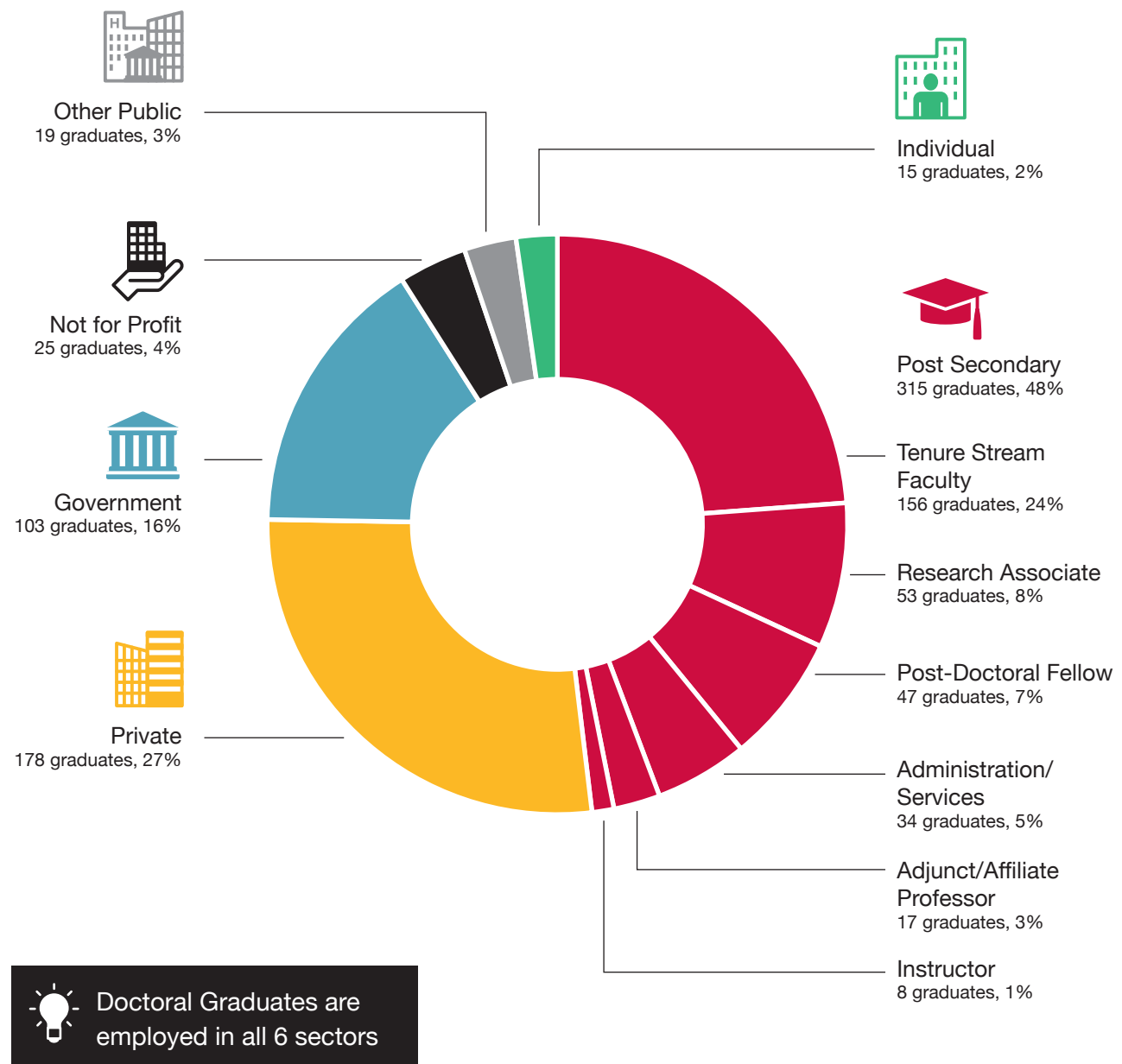
 28% increase in international PhD students over 9 years

# Where do they work?

Identifying the career pathways of our PhD graduates highlights their broad aptitudes and the many ways in which they have been able to apply their skills and expertise to a variety of careers.

## Career Destinations of OAC Doctoral Graduates

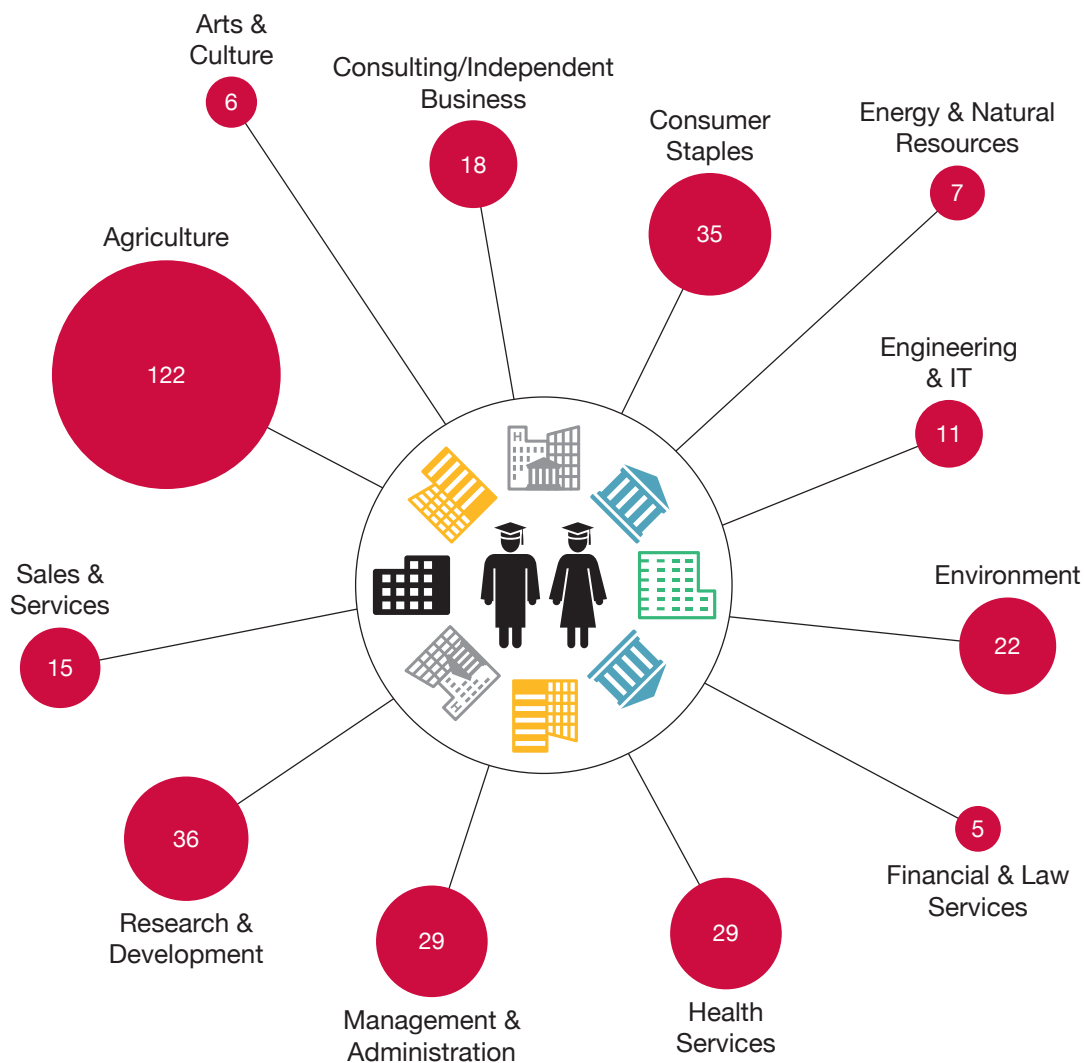
653 Graduates, in 2018-2019 by Employment Sector





## Non-Post Secondary Employment Job Categories

653 OAC Doctoral Graduates, in 2018-2019 by Job Category.



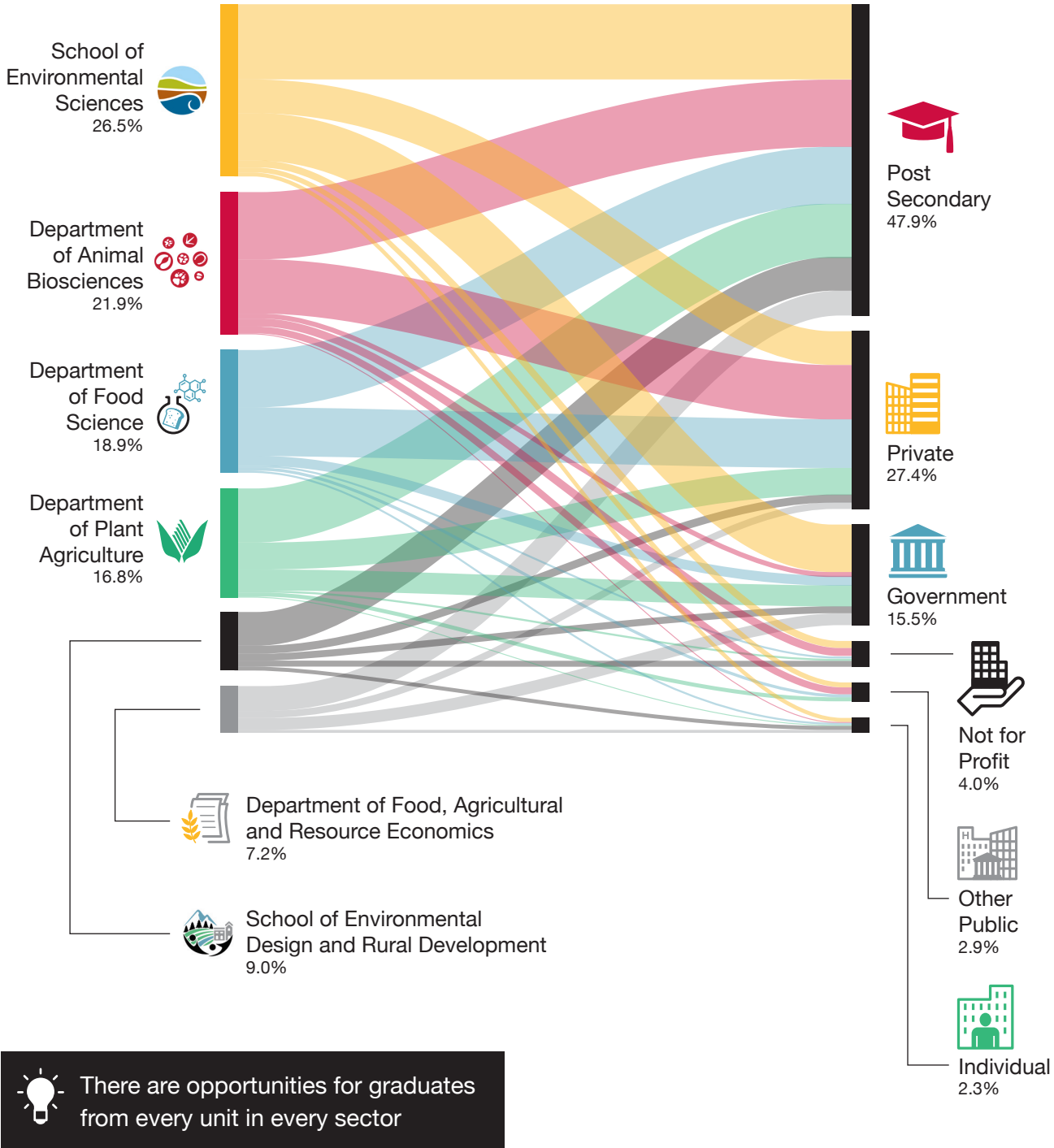
9 Circles sized according to number of graduates  
Number of graduates in job category.  
Categories with less than 5 graduates  
are not included.



Graduates are working in fields related to their disciplinary expertise and employed in leadership positions

# Employment Sector of OAC Doctoral Graduates by Academic Unit

2018-2019, 653 Graduates.

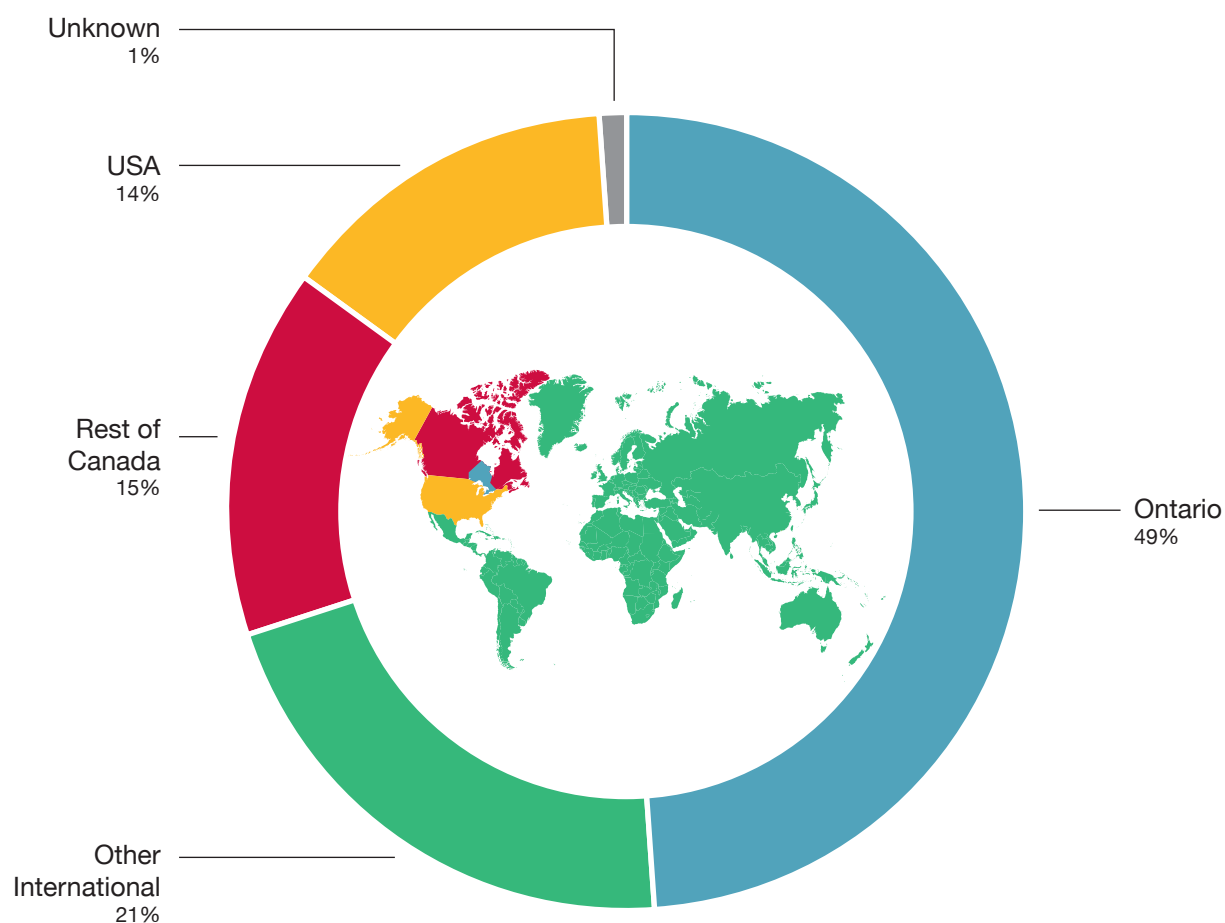


Of graduates located in this study, 35% are working internationally, with 14% working in the United States. The remaining top five countries where our graduates work include Brazil, China, Mexico, the United Kingdom and Ghana.

Many graduates (49%) chose to remain in Ontario after graduation, however 15% have taken employment in other Canadian provinces.

## Employment of Graduates by Location

2018-2019, 653 Graduates.



Our PhDs are generating impactful discoveries in disciplines of central importance in addressing the challenges we face in the world

# Final Thoughts

OAC PhDs are securing rewarding positions in all employment sectors and having impact around the globe. Given the need for state of the art knowledge and the integration of research in all aspects of today's economy, the skills and expertise of PhDs – particularly in relation to food, agriculture, communities and the environment – are in demand in all sectors.

Many universities and related associations have been looking more closely at the pathways of PhD graduates, and how these trends vary across time, location, and program. PhD graduate numbers have increased within Canada, and in Ontario, PhD enrolment has nearly doubled over the past 15 years (HEQCO, 2016). The patterns of employment of OAC PhDs are similar to those of the province as a whole with employment across all sectors. However, OAC PhDs have greater levels of employment in the post-secondary education sector (48%) than the provincial average (40%) (HEQCO 2016).

OAC doctoral programs train the leaders needed to support the academic and research enterprise, while also contributing valuable skills and expertise to all sectors. With the agriculture and food industry being a strong driver of economic growth in Canada, and the increasing need to respond to changing climates with sustainable and innovative approaches, there is increasing demand for our graduates. In the next release of the OAC Doctoral Destinations Project the distinctive career pathways of graduates from each of our academic units and specific occupations within each sector will be examined in more detail. **Pursuing a PhD in OAC is a decision to pursue a PhD with impact, and to become an inspiring leader committed to improving life.**

## Additional Resources and Reports Illustrating the Value of the PhD

Rethinking the PhD  
News and Blog Posts.  
Canadian Association  
For Graduate Studies.

Why should you hire  
a PhD student in your  
company?

Why earning a PhD  
is an advantage in  
today's industry job  
market.

Planning for  
Tomorrow 2.0.

HEQCO, 2016, [heqco.ca/data-and-resources/quick-stats/2-7-phd-enrolment-in-ontario-universities/](http://heqco.ca/data-and-resources/quick-stats/2-7-phd-enrolment-in-ontario-universities/)



Interested in our programs? Contact us at [gradinfo@uoguelph.ca](mailto:gradinfo@uoguelph.ca)