Canada is well-renowned for attracting a large number of international students and researchers to its academic institutions, with more than 250,000 choosing to study there each year – a figure that is continuously rising. To uncover why so many are drawn to this particular nation, we explore the benefits that Canada brings to researchers and students from across the globe.

**WITH HIGH-QUALITY** education and rigorous academic standards, Canadian qualifications and research are greatly valued throughout the world. Not only this, the nation offers a good quality of life and a wealth of experiences through having a rich multicultural society and healthy and safe communities. Canada can certainly provide students and researchers with the full package – including affordable education, abundant research opportunities, high living standards and potential permanent residence – which is perhaps why so many people are choosing this nation over other world-class research destinations.

**Advantages to studying in Canada**

**Lower tuition fees** – Studying in Canada is often much cheaper in terms of international tuition fees, accommodation costs and living expenses than in other nations such as the US, UK, France and Australia.

**A healthy and safe place to live** – Canada can offer students and researchers a good quality of life. The nation is continuously ranked highly in the UN human development index review on health, education and income performance.

**Research opportunities** – A significant part of Canadian university education is based on research; academic institutions therefore offer their students plenty of opportunities to contribute to R&D activities. Particular areas in which government and industry are focusing their efforts include: telecommunications, medicine, agriculture, computer technology and environmental science.

**Work during studies** – To help improve finances and keep debts to a minimum, international students are allowed to work while studying in Canada. If candidates qualify, their study permit allows them to work up to 20 hours per week in term time and full time during holidays.

**Postgraduate work permit** – After completing their studies, students are eligible to obtain a postgraduate work permit, something which is difficult to receive in other countries. This allows graduates to work in Canada for the same length of time as the duration of their programme.
The 2015 Nobel Prize in Physics was awarded to Canadian Arthur B McDonald, Professor Emeritus at Queen’s University. The joint award – also attributed to Japanese physicist Taekai Kajita – recognises the researchers’ contributions to the experiments which demonstrated that neutrinos change identities.
Canada’s investments in science and technology

The Canadian Government is supporting a wide array of R&D activities that aim to bring value to the research community and positively impact the nation and beyond. Below are some of the key areas in which the Government is investing:

- **Infrastructure** – As part of Canada’s Economic Action Plan, the Knowledge Infrastructure Program is providing up to CA $2 billion for the repair, maintenance and construction of universities and colleges. This will help improve research capacity, attract new students and create a better learning environment.

- **Building connections** – Canada’s research community is provided with an internationally competitive ultra-high speed network, CANARIE, which enables cutting-edge, data-intensive research across Canada.

- **Evidenced-based public policy** – The Government supports independent, authoritative, evidenced-based and expert reviews that inform the development of public policy for science, engineering and the humanities in Canada.

- **Natural sciences and engineering** – The Natural Science and Engineering Research Council of Canada encourages Canadian companies to invest in postsecondary research projects to help uphold the nation’s scientific excellence. This in turn helps to support university students, promote discovery research and encourage innovation.

- **Gene interaction** – With an aim to bring economic and social benefits to Canada, Genome Canada is working on the development and application of genomics and genomic-based technologies.

- **Taking big risks for groundbreaking ideas** – By bringing together some of the world’s best researchers, the Canadian Institute for Advanced Research is tackling the biggest challenges in health, environment and technology. They provide researchers with the freedom to take intellectual risks, which are deemed crucial for the development of new knowledge and its effective application.

- **Advanced theoretical physics** – The Parameter Institute for Theoretical Physics is dedicated to taking on the most fundamental questions in theoretical physics alongside offering a world-class outreach programme.

- **Health innovations** – To help build a sustainable and productive Canadian health system, the International Centre for Health Innovation fosters innovation among researchers, policy makers, entrepreneurs and clinicians.

- **Space technologies** – As a leader in the development and application of space knowledge, the Canadian Space Agency is dedicated to R&D in areas such as astronomy, life in Space, Mars, science in weightlessness, solar-terrestrial sciences and stratospheric balloons.

- **Measuring progress** – Statistics Canada is gauging the extent to which scientific and technological progress has impacted the economy and society. It is working to provide statistical and analytical information on various activities including R&D, innovation, advanced technology and emerging technologies.

R&D investments in Canada

With an estimated investment of CA $30.4 billion on R&D activities in 2013, we take a look at how different sectors have been contributing to research funding and performance.

1. Private sector: ~47% ($14.23 billion); 2. Federal government: ~20% ($6.08 billion); 3. Higher education sector: ~17% ($5.27 billion); 4. Foreign investors, provincial governments and non-profits: ~16% ($4.86 billion).

Funding distribution

Federal funding is mainly distributed between research conducted by federal government departments, such as the National Research Council, and that which is conducted by the higher education sector. Academic research activities originate from numerous agencies, including the three research granting councils (the Tri-Council): the Natural Sciences and Engineering Research Council of Canada, the Social Sciences and Humanities Research Council of Canada and the Canadian Institutes of Health Research. Additionally, the federal government provides a small amount of funding to the business and non-profit sectors. It also indirectly supports private sector research through the Scientific Research and Experimental Development tax credit programme.

Funding programmes

Home to some of the world’s top research facilities and academic institutions, Canada offers a wealth of international scholarship opportunities to non-Canadian researchers and students. Depending on the country of origin, potential applicants can choose from a range of scholarships, fellowships or funding opportunities offered by Global Affairs Canada and other Canadian federal government departments. Detailed information about education opportunities for students and researchers can be found on the International Education Division of Global Affairs Canada webpage: http://bit.ly/education_in_Canada.
Global Affairs Canada offers a range of short-term exchange programmes, online scholarships and research projects, with clear guidelines provided on who the programme is suitable for and the application process.

Current awards are available to:

- International students and postdoctoral researchers in Canada
- Faculties and researchers to conduct studies in Canada or abroad
- International academic institutions for their students to learn in Canada

The Canadian Bureau for International Education provides numerous postsecondary scholarships and special programmes for international students. International education offices located at British Columbia universities, colleges and institutes also offer scholarships and bursaries for international students.

A unique research ecosystem

Across the nation, higher education institutions play an important role in supporting research that leads to innovation. The Canada’s research ecosystem is different from other developed countries in that it places greater emphasis on universities performing R&D activities both nationally and internationally. Indeed, the Canadian universities’ contribution to R&D is 21 per cent higher than the Organisation for Economic Co-operation and Development (OECD) average. Having academic institutions heavily involved in research infrastructure and support has led to Canada producing world-class, pioneering basic and applied research – an outcome that has subsequently enhanced the nation’s social and economic development.

Top 10 research universities

In recent years, the Government has committed substantial investments to university research, demonstrating its dedication to advancing knowledge and innovation. But which Canadian universities are leading the way in research excellence? Below we outline the nation’s top 10 academic institutions in 2015

1. The University of Toronto

With its research history dating back to 1827, the University of Toronto (UofT) has one of the strongest research and teaching faculties in North America and is making a significant impact on both national and international research. UofT lists 68,114 undergraduate students (56,220 domestic and 11,894 international) and 16,442 graduate students (13,927 domestic and 2,515 international). No less than 10 Nobel Laureates across a range of disciplines were based at UofT at some point during their careers.

2. The University of Montréal

Founded in 1878, the University of Montréal (UdeM) plays a key role in the city’s knowledge-intensive industrial sectors, including biotechnology, environment and aerospace. UdeM offers over 250 undergraduate and 350 graduate programmes to 66,988 students. Among its illustrious alumni are the UN High Commissioner for Human Rights Louise Arbour and renowned engineer and architect Ernest Cormier.

3. The University of British Columbia

As a global centre for research and teaching, the University of British Columbia (UBC) is well-known for encouraging innovation and bold thinking. Attracting over 58,000 students from 140 countries across the globe, UBC was ranked 34th in the world by Times Higher Education, UK. During the 2014-2015 academic year, researchers at UBC received $531 million of funding for 8,278 projects in arts, sciences and medicine.

4. McGill University

For 11 consecutive years McGill University has been ranked first in Canada among medical-doctoral universities. It has the highest number of Nobel Prize winners (12) and highest percentage of PhD students among Canadian universities.

5. The University of Alberta

The University of Alberta’s vision is to inspire the world through driving outstanding achievements in discovery and learning. Its reputation for excellence in translational and discovery-driven research led to several awards in 2015, for example, the University of Alberta Professors Mark Lewis and Zhenghe Xu earned Royal Society honours in recognition of their outstanding contributions in mathematical biology and engineering respectively.

6. Laval University

Established in 1663, Laval University was the first French-language university in the Americas. Today, the University is a leader in research and innovation with over 1,300 research professors and $300 million in annual research funding.

7. University of Calgary

The University of Calgary’s core mission is to discover new knowledge and translate those discoveries into applications that provide benefits to Canada and beyond. This year is the University’s 50th anniversary, and it aims to reach its Eyes High strategy of becoming one of Canada’s top five research universities.

8. McMaster University

McMaster University has gained a world-class reputation for offering innovative programmes across its six faculties: DeGroote School of Business and the faculties of engineering, health sciences, humanities, science and social sciences.

9. University of Ottawa

Home to over 50,000 students, the University of Ottawa focuses its research efforts on four core areas: Canada and the world; health; e-society; and molecular and environmental sciences. The University’s strengths include its bilingualism and annual contributions of up to $4.7 billion to Canada’s economy.

10. Western University

Founded in 1878, Western University has, over the years, been acclaimed for research excellence across a range of disciplines. These include: neuroscience/brain and mind; materials and biomaterials; environmental sustainability; and green energy.

[Source: www.researchinforesource.com/top50_univ.php]

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