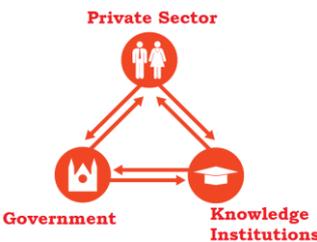




EURAXESS members in Focus

EURAXESS – Researchers in Motion is an initiative of the European Research Area (ERA) that addresses barriers to the mobility of researchers and seeks to enhance their career development. This pan-European effort is currently supported by 41 countries, of which we will profile one in each of our quarterly EURAXESS Links Brazil newsletters. In this edition, we zoom in on the Netherlands



The Dutch government follows a top sector approach where nine sectors have been identified as priority areas including Agri-Food, Horticulture, High-Tech, Energy, Logistics, Creative industries, Life Sciences & Health, Chemicals, and Water. The Government, private sector and academia together form a 'Golden Triangle' also known as 'Triple Helix' model, in which interactions among each other are highly encouraged. In the Netherlands, the private sector is a major contributor to overall R&D expenditure and there exist strong linkages between academia and industry.

EURAXESS members in Focus: THE NETHERLANDS

The Netherlands, often referred to as Holland, was created by the Dutch in the delta where three large rivers flow into the North Sea. Due to its strategic location, the country is known already for centuries for its international traders and world's first multinational corporation, which originates from the 17th century. Presently ranked **5th on both Global Innovation Index and Global Competitiveness Report 2015-2016**, the Netherlands offers a truly innovative and creative environment.

The Dutch research environment stands amongst the best in the world. **All 14 Dutch universities are ranked in the top 200 of Times Higher Education Rankings.** A study commissioned by the European Commission, in relation to the Europe 2020 strategy, places the Dutch research system among the very best in terms of openness, excellence and attractiveness.

The Netherlands' research, development & innovation system

Public Sector research institutions in the Netherlands consist of 14 universities, 18 KNAW Institutes¹, 6 Netherlands Organization of Scientific Research (NWO) Institutes, 5 Large Technological Institutes (GTIs)², 14 TNO³ Institutes, and a number of other state owned research and advisory centers. Together, these universities and institutes form the backbone of the research and innovation landscape in the country.

In 2014, Dutch institutions published 72 000 publications, ranking 5th in the world. In terms of excellence (share of highly cited publications, top 10%), Clinical Medicine, Biomedical Sciences, Basic Life Sciences and Physics & Material Science were top research areas. The total number of European patents with Dutch origin in 2015 stood at a total of 1998.

The Netherlands is also maintaining a strong position in the European Research Programme Horizon 2020, with 7,6% of the budget flowing to Dutch participants. The private sector is taking its proper share with 28% of all funds flowing to the Netherlands. In [EUREKA cluster projects and Eurostars SME innovation projects](#), the Netherlands is not only a strong contributor in budget, but also in private sector participation.

¹ So called because KNAW acts as the umbrella organization for these institutes

² Conducting applied research in aerospace, water management, hydraulic engineering, maritime research and energy research

³ TNO stands for Netherlands Organization for Applied Scientific Research which is an independent organization focusing on applied science



Did you know that in the Netherlands, a doctorate training is not regarded as study but as serious research? PhD candidates are often paid.

Research Excellence in the Netherlands

The Netherlands is very successful in securing European research funding both from the [Marie Skłodowska Marie Funding program](#) and [ERC funding](#). In order to promote research excellence, NWO offers two types of funding – ‘Innovation Research Incentive Scheme’ for talented, creative researchers who engage in innovative research, which provides three types of grant ([Veni](#), [Vidi](#), [Vici](#)) geared to different stages in a researcher’s career and ‘[Spinoza prize](#)’ which is offered yearly to 3 or 4 excellent researchers, who stand out with groundbreaking research conducted in the Netherlands.

Recruitment Opportunities

Public Sector Recruitment Opportunities

The Netherlands offers various recruitment opportunities for international candidates. All university research positions that are open to international researchers are listed on [EURAXESS job portal](#) and [www.academictransfer.org](#). One can also visit [FOM Research vacancy](#) page, which lists vacancies available at FOM research institutes. Individual institutes also list such opportunities on [their websites](#).

A large part of R&D in the Netherlands is carried out by **private companies** and they often recruit researchers at varied levels. Many of these companies are located in organized hubs such as ‘Brainport’ in Eindhoven, that is well known as Europe’s leading High-tech region, and ‘Health Valley’ which is a network of 700 health related organizations working on innovation in healthcare space.

PhD positions

The Netherlands is a very attractive destination to pursue PhD degree.

A PhD from Dutch university is highly regarded because of high academic standards. The Netherlands has an excellent international ranking for number of publications per researcher (2nd) and for the impact of research publication (4th). Almost all PhD positions are linked to a university but PhD-candidates may find place at other institutes or even in industry.

Private Sector Recruitment Opportunities

Many Dutch companies, both large MNCs as well as SMEs, such as Philips, ASML, Xelvin, Cosine and OctoPlus are continuously looking for Bachelors, Masters and Ph.D.’s with specialist knowledge.



There are various **funding agencies** in the Netherlands:

- The Netherlands Organization for Scientific Research (NWO),
- Dutch Technology Foundation (STW),
- The Netherlands Organization for Health Research & Development (ZonMW) and
- The Royal Netherlands Academy of Arts and Sciences ([KNAW](#)),

which offer various grants and fellowships for individual researchers.

Funding Opportunities

NWO provides [71 grants](#) for researchers, from PhD candidate level onward. [Veni](#) is very attractive grant for international researchers, which allows those who have recently obtained their PhD to conduct independent research and develop their ideas for a period of three years. KNAW has 15 funding instruments amongst which are the NIAS Individual Fellowships. These fellowships are provided to senior scholars in humanities and social sciences.

Important information for incoming researchers

The Netherlands belongs to the EURAXESS initiative that provides support when coming to the Netherlands (in key areas such as visas, housing, schooling, etc.) to researchers and their families. EP-Nuffic is the national coordinator of the Dutch network. Additional information can be found at www.euraxess.nl.

Interviews with Brazilian researchers in the Netherlands

The Dutch higher education agency [Nuffic Neso](#) collected testimonials of Brazilian researchers based in the Netherlands. Read the story and advices of Eric Araujo, adjunct Professor at Computer Science Department at Federal University of Lavras (UFLA), Minas Gerais, Brazil - and PhD Candidate at the VU Amsterdam at the Agent Systems Research Group (ASR) [here](#) and Rodrigo Coutinho, alumni of the Department of Genetics - University Medical Centre Groningen (UMCG) [here](#).

EURAXESS Brazil also interviewed the Brazilian researcher Rafael Viana de Carvalho who did his PhD in Computer Science at Leiden University. Rafael is still involved in Brazil-Netherlands scientific cooperation and also represents in Brazil the Association of Brazilian researchers in the Netherlands. Read his interview [here](#).



Science without borders

Between 2011 and 2015, the Netherlands received over 500 researchers at PhD and Postdoc level. The so-called 'Sandwich PhD' (a one or two years PhD programme in Holland) is the most popular exchange (286 students over the period, compared to 106 full PhDs). The most popular research areas are Biology, Biomedical Sciences and Health Sciences, Sustainable Agriculture Production and Engineering and other technical areas.

Brazilian-Dutch cooperation in Science, Technology and Innovation

"The Netherlands and Brazil have signed several (governmental) agreements with the intention of stimulating cooperation in the field of knowledge and innovation. The main agreement is a **Memorandum of Understanding (MoU) on Science, Technology and Innovation**, signed in 2012. Topics of mutual interest identified by a Joint Committee include: **sustainable cities, bio-economy, climate change, astronomy, food and agriculture technology, water resources, science communication, and renewable energy.**"

Brazil and the Netherlands have been very successful together in the field of science. The share of Brazil – Netherlands collaboration might only be 4% of Brazil's international collaboration, however, this collaboration is of very high quality with an impact of more than three times of the world average. It is then no surprise that this cooperation has been growing (19% since 2010), including through joint Dutch-Brazilian calls (e.g. NWO- FAPESP). All thirteen universities in the Netherlands (and several colleges) have presence in Brazil, though with varying levels of activity. It is, for example, the case of University of Twente who signed a [MoU with the City of Curitiba](#) which symbolises the start of a five-year collaboration consisting of exchange of knowledge and people and joint research projects in order to realise a Smart Curitiba.

Furthermore, the Netherlands is a large investor in Brazil, and several of the Dutch companies in the country are active in the field of technology and innovation. There is an interest of both the Netherlands and Brazil in adapting the Dutch experience with the so-called 'Triple Helix' models to the Brazilian context, allowing government, private sector and academia to join forces. Several of such partnerships are currently being developed, e.g. [BE-Basic](#) and [Living Lab Bio-Economy](#)."

Sources: Dutch embassies to India and Brazil; [Holland Innovation Network](#); RVO; [Nuffic Neso Brasil](#); Collaborate to innovate, knowledge and innovation cooperation between Brazil and the Netherlands, report by Advisory council for science, technology and innovation Awti, August 2015