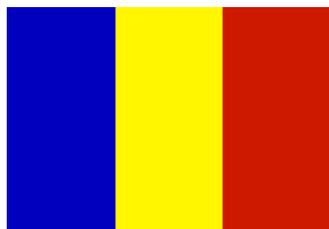




EURAXESS members in focus:

Romania



1



2

Location	South-eastern Europe
Capital	Bucharest
Population	~19 million
Area	238,397 km ²
Language	Romanian
Currency	RON
Time zone	UTC+2



Whereas probably the most known thing about Romania is the legend of Dracula, Romania is much more than that. Think medieval towns, time-capsule villages, delicious cuisine, picturesque monasteries, virgin forests, majestic mountains, a blossoming art community, impressive landscape and, of course, high-quality education and excellent research facilities.

The Ministry of Research, Innovation and Digitisation ([MCID](#)) is responsible for the overall research, development and innovation (RDI) policy described in its National Research and Innovation Strategy. While the Romanian Academy coordinates fundamental research in 14 sections, carrying out programmes of national interest via its institutions, MCID oversees the policy side with the help of the **Executive Agency for Higher Education, Research, Development and Innovation Funding** ([UEFISCDI](#)), the **Romanian Space Agency** ([ROSA](#)) and the **Institute for Atomic Physics** ([IFA](#)).

The main funding instruments of the National R&I Strategy are the Romanian National Plan for Research, Development and Innovation (PN3), the Core Programmes and the Operational Programme Competitiveness – Axis 1 (POC-AP1).

Together, PN3 and POC-AP1 allocate competitive, project-based funding through a set of tailored programmes to address the specific needs of the distinct R&D performers and their technology readiness levels, and to support inter-sectoral and cross-border collaboration. Proposal selection is based on peer review, complying with the international principles of evaluation.

Four consulting bodies help MCID develop, monitor and implement RDI policies: the Advisory Board for Research Development and Innovation, the National Council for Scientific Research, the National Council for Technology Transfer and Innovation, and the National Council for Ethics of Research, Technology Development and Innovation.

The RDI system in Romania consists of 263 public R&D organisations (56 public universities, 46 national R&D institutes, 65 research institutes and centres of the Romanian Academy, and another 96 public research institutes and centres), as well as about 600 private companies declaring their R&D activities. Meanwhile, the Network for Technology Transfer and Innovation (ReNITT) has around 50 specific organisations (technology transfer centres, technology information centres, technology and business incubators) and four science and technology (S&T) parks.

¹ Image by [Clker-Free-Vector-Images](#) from [Pixabay](#)

² Source: [Wikipedia](#)



The RDI sector employs 43,973 people nationwide³. This includes 18,249 (41.5 %) with a PhD or postdoctoral degree, 37,393 (85.0%) with a higher education degree, and the remaining 6,580 (15.0%) possess secondary education certificates. The vast majority of Romanian R&D staff members (31,271 or 71.1%) are active in the public sector, while the remaining 12,406 (28.2%) work in privately owned institutions. Nearly three-quarters (72%) of the employees work full time; 27,168 (61.8%) are categorised as researchers, 6,195 (14.1%) as technical staff, and the remaining 10,610 (24.1%) are listed as 'other'.

Scientific visa



In Romania, a long-stay visa for scientific research activities, identified by the symbol *D/CS*, is granted to foreigners once approved by MCID and the General Inspectorate for Immigration.

Currently, 29 research organisations⁴ are licenced under the Scientific Visa Directive (Directive no. 801/2016), hosting researchers from third countries including Moldova, China, Algeria, Turkey, USA, South Korea, Japan, Canada, Mexico, Morocco, India, Egypt, Republic of Serbia, Georgia, Ukraine, Russia, Israel, Macedonia, and Colombia. They are carrying out research activities in universities/institutes across Romania and under various funding and programming environments, including the EU Horizon framework programmes, the Romanian National Research, Development and Innovation Plan, EU Structural Funds, and inter-organisational agreements.

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 42 countries, of which we will profile one in our quarterly e-newsletter.

Marie Skłodowska-Curie Actions (MSCA) are a reference programme for doctoral education and postdoctoral training in the EU. They support the mobility of researchers between countries, sectors and disciplines, helping them acquire new knowledge, skills and competencies. MSCA also promote excellence and set standards for high-quality researcher education and training in line with the European Charter for Researchers and the Code of Conduct for the recruitment of researchers. During Horizon 2020 (2014-2020), €16.20 million was directed towards Romanian RDI organisations involved in MSCA projects. Colombia is among the top 10 nationalities of fellows working in Romania, while the USA is in the top 10 destinations of Romanian fellows going abroad via MSCA.

Romanian entrepreneurial ecosystem

Romania welcomes foreign investments by providing special tax incentives and ensuring an investment-friendly business climate. The most intense R&D activity is taking place in the automotive, IT and automation sectors

The Romanian entrepreneurial ecosystem is increasingly dynamic and shows high potential. UiPath is the world-leading provider of robotic process automation (RPA) and artificial intelligence (AI) software, growing from around \$1 million to over \$100 million in revenue in less than 21 months. Following UiPath's success,

³ Figures reported at the end of 2019

⁴ <https://www.research.gov.ro/ro/articol/5226/tiin-ifica-pentru-cercetatorii-straini-in-scopul-desfurarilor-in-romania-de-activita-i-de-cercetare-dezvoltare-inovare-pentru-o-perioada-mai-mare-de-90-de-zile>



other start-ups grew rapidly. Most of the scale-ups operate in RPA, AI, cybersecurity, mobile technologies, and online applications.

Innovation in Romania is of great importance because it is regarded as creative driver and an economy booster. Human talent and R&D are crucial factors for enhancing innovation. Public expenditure on education and intensive staff training also stimulate innovation in high-performing economies.

From 2014 to 2020, Romania launched its strategy⁵ for strengthening entrepreneurship through policy measures focused on improving access to finance, responsive administration and entrepreneurship. The strategy addresses inclusiveness, job-creation in rural areas, entrepreneurship education and support programmes, aiming mainly at the vulnerable or disadvantaged social groups. Romania is thus addressing a legacy of disparities between rural and urban communities by supporting entrepreneurship and job-creation in underprivileged areas.

In 2019, Romania reported over 1.38 million entrepreneurs, which is the highest number in decades. The fact that 37.5% of them were women shows Romania's progress in gender equality as well as other inclusion criteria (SBA, 2019).

Special programmes and recommendations have been delivered to foster entrepreneurship among women, Roma and refugees in the country. Entrepreneurship programmes were designed for socio-economically disadvantaged and vulnerable groups.⁶

Study in Romania – www.studyinromania.gov.ro

Romania is an excellent place to study. Diplomas are recognized all over Europe and beyond. In addition, the Diploma Supplement (DS), issued automatically with a graduation diploma, is bilingual and thus ensures transparency of learning outcomes and improves employability.

In 2020, there were 91 accredited Higher Education Institutions (HEIs) – 54 public and 37 private universities – with a wide choice of university programmes.

The Study in Romania team has recently released a video to promote Romanian higher education. It is accessible on the [Study in Romania YouTube account](#).

The UEFISCDI agency has developed systems to increase the accuracy, transparency, security, volume and usefulness of higher education and research data. One tool offered is the National Student Enrolment System (RMU), as part of the EU-funded 'EBSI4RO: Connecting Romania through Blockchain' project, in partnership with the University Politehnica of Timisoara (UPT). EBSI4RO is implementing a credentials system for digitally verifying diplomas and qualifications using blockchain technology. It also handles so-called micro-credentials such as proof of informal learning.



National Student Enrolment System

Over 1.4 million students enrolled in over 7,000 study programmes starting as from 2015.

⁵ The Romanian Governmental Strategy for Development of SMEs and Business Environment (RGSDSMEBE) 2020 (OECD, 2018)

⁶ <https://accelerate.gov.ro/storage/sustainability-and-innovation-in-the-romanian-entrepreneurial-ecosystem.pdf>



The online community of researchers, innovators, technicians and entrepreneurs



Brainmap – www.brainmap.ro

Another important UEFISCDI initiative is the online community of researchers and entrepreneurs, Brainmap, which assembles more than 42,000 Romanian and foreign experts into a single human resources (HR) portal for research, innovation and entrepreneurship. The platform is searchable by expertise, country and institution, and it facilitates the selection of experts involved in evaluation processes organised by UEFISCDI.

EERIS – <https://eeris.eu>



Engagement in the European Research Infrastructure System (EERIS) is the first Romanian online platform connecting research infrastructure owners with potential clients (researchers and company representatives). Developed by UEFISCDI, the portal is a gateway for booking services provided by public and private Romanian research infrastructures. Since 2020, the platform has also accepted registrations from research infrastructures and organisations from abroad. The platform’s ambition is to build on the services and promote the infrastructures and available equipment both at national and international levels. EERIS is being upgraded using blockchain technology by implementing reputation management tools that will enhance direct collaboration between researchers and research institutes online using an algorithm for trustworthy service contracts.

ELI-NP – www.eli-np.ro



The Extreme Light Infrastructure Nuclear Physics ([ELI-NP](http://www.eli-np.ro)) is one of the most prestigious research infrastructures in the world due to its state-of-the-art equipment. Implemented by the National Institute and Nuclear Engineering Horia Hulubei (IFIN-HH), ELI-NP has been designated by the Nuclear Physics Collaboration Committee of the European Science Foundation as a major facility in the Nuclear Physics Long-Range Plan.

ELI-NP is building a team of dedicated, talented people willing to contribute to the operation and performance of laser-matter interaction experiments using the most powerful laser in the world.

Open positions for early-stage and experienced researchers interested in working in an innovative, dynamic environment are posted here: www.eli-np.ro/jobs.php

Danubius – www.danubius-ri.eu



The International Centre for Advanced Studies on River-Sea Systems (DANUBIUS-RI) is a pan-European distributed research infrastructure supporting interdisciplinary research on river-sea systems. DANUBIUS-RI’s mission is to facilitate scientific excellence in this complex field, offering state-of-the-art research infrastructure and providing integrated knowledge to sustain and protect river-sea systems.



Discover Romania



Bran Castle, also known as Dracula's castle



The Palace of the Parliament Bucharest



⁷Romania Danube Delta

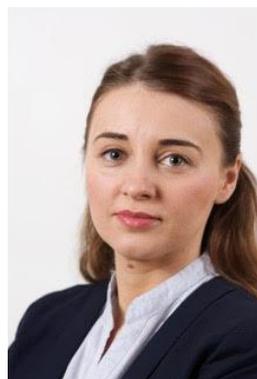


⁸Transfagarasan – one of the best roads in the world

EURAXESS Romania – www.euraxess.gov.ro

The coordination of EURAXESS Romania is ensured by UEFISCDI and The Ministry of Research, Innovation and Digitisation. The EURAXESS network in Romania has **nine support centres**: Banat University of Agricultural Sciences and Veterinary Medicine, Timisoara; Institute for Macromolecular Chemistry 'Petru Poni' Lasi; Lucian-Blaga-University of Sibiu; Bucharest University of Economic Studies; University of Bucharest; 'Gheorghe Dima' Music Academy; Valahia University Targoviste; North-West Regional Development Agency, Cluj-Napoca; and Chamber of Commerce and Industry Brasov.

Testimonial: A Romanian researcher in Mexico



[Dr. Corina-Diana Ceapă](#) obtained a Bachelor's Degree in Biochemistry at the University of Bucharest, and completed a Master's Degree in Biochemistry and Molecular Biology at the same university, received an Erasmus grant and did her MSc thesis in structural biology, in Lille, France. She graduated from a Marie-Curie PhD at the interface of industry (Danone Research) and academia (Wageningen University) in the Netherlands, studying interactions between bacteria and hosts, with a focus on probiotics. She completed postdoctoral studies at the University of Chicago, USA and at the Biomedical Research Institute, UNAM, Mexico (2018-2020).

Dr. Ceapă joined the Institute of Chemistry as Head of the Microbiology Laboratory in 2020, and currently she is an Associate Researcher C attached to the Department of Chemistry of Natural Products and belongs to the Mexican National System of Researchers with the SNI1 level. She has published 10 articles in indexed journals, a world patent, a book, and a book chapter. Recently, the group and collaborators were awarded financing from DAAD for GLACIER - The German-Latin American Center for Research and Training in Infection and Epidemiology.

Her research group proposes the application of data and genome mining to search for new bioactive molecules, their synergistic use and their validation in tests carried out with the latest high-performance technologies to combat the resistance of pathogens to antibiotics in Mexico.

Main research lines:

- Discovery and validation of antibacterial biotechnology.
- Antimicrobial resistance, ultra-resistant bacteria, priority pathogens.
- Genomics of host-microbe interactions, comparative genomics, genomic mining.

⁷ Image by [Andrei Prodan](#) from [Pixabay](#)

⁸ Photo by [Ümit Yıldırım](#) on [Unsplash](#)