



Go – Portugal: *Global Science and Technology Partnerships Portugal Portugal –US Colaborations*

Carnegie Mellon University - CMU-Portugal

Massachusetts Institute of Technology - MIT -Portugal

University of Texas at Austin - UTAustin-Portugal

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FCT

Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

FCT is the Portuguese national funding agency for science and research.

- FCT aims to establish Portugal as a global reference for science, technology and innovation.
- FCT works to fully harness knowledge generated by scientific research for Portugal's economic development and social progress

Transnational Cooperation - International Relations Department

- Support to the internationalization of the National Scientific and Technological System. Support the participation of the scientific community in Multilateral Programmes and Scientific Networks, in International Organizations, as well as in joint projects or undertakings, part of scientific and technological cooperation agreements or bilateral agreements between Portugal and other countries and institutions.

Go – Portugal: *Global Science and Technology Partnerships Portugal*

- Internationalization of Portuguese Universities and research organizations,
- Promote the access to world-class scientific networks
- Cultural change on research ecosystem enhancing closer ties of scientific cooperation,
- Training of highly qualified human resources,
- Generation of economic impact through Science & Technology (S&T) based innovation

1 Phase
2006-2012

2 Phase
2013-2017

3 Phase
2018-2023

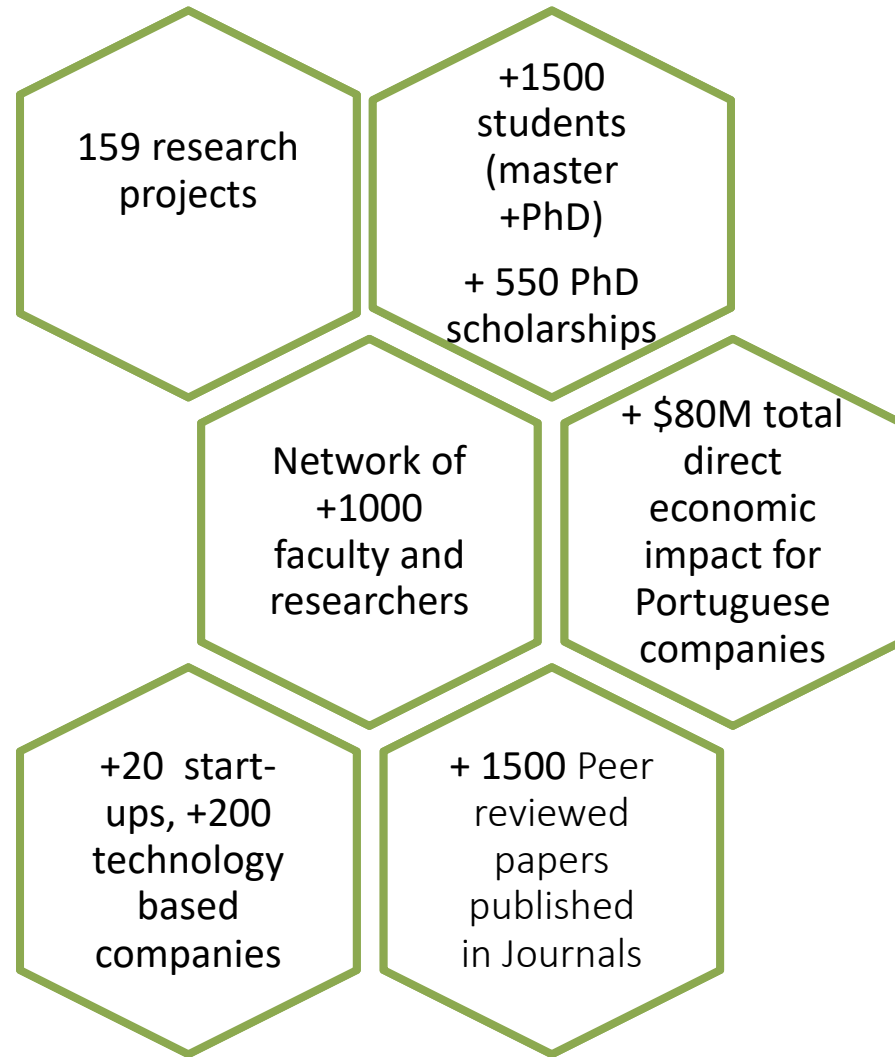
- Promote innovation-focused scientific research, with a strong technology transfer component.

- Fostering the creation of qualified jobs and attracting human resources of recognized international merit to Portugal
- Promote the affirmation of Portugal in the world through the scientific and economic valorization of an innovative agenda on "Atlantic Interactions"
- Attract financing and mobilize national and international actors through an innovative approach in several areas of knowledge.

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Programs in figures

Education and training
Research projects
Innovation and entrepreneurship activities





A **addressing key societal** issues through quality education and research in the emerging field of **engineering systems**

Education & talent development

- Dual Degree PhD
- Executive Programs
- Visiting Students, Researchers and faculty

Reserach and Innovation

- Large scale projects that closely integrate the Program's research, education, and industry collaboration activities
- Shorter projects designed to jumpstart high-impact potential research activities of strategic relevance to the CMU Portugal Program.

Innovation

- InRes – Entrepreneurship in Residence
- Industrial Affiliates Program

Place Portugal at **the forefront of innovation** in key focused areas of Information and **Communication Technologies (ICT)**, by promoting an innovation ecosystem with a tight coupling between cutting-edge research, world-class graduate education, and highly innovative companies in the **data-driven economy**.



scientific areas

Advanced Computing

High Performance Computing, Data Analytics and Visualization

Nanotechnologies

Materials for New Markets

Space - Earth Interactions

Space
Sea
Climate
Clean Energy

Medical Physics

Emerging Cancer Therapies

TIE | UTEN

Technology Innovation Entrepreneurship

instruments

research

Exploratory Research Projects

Strategic Research Projects

education

Advanced Training Programs

Research Exchanges

innovation

Training

Mentoring

Residency in Austin

Industrial affiliates

for tech startups

Promote **new frontiers of knowledge** in strategic themes, through the advancement of high-level education, research, and commercialization activities.
Develop a knowledge-based society, and **foster science and innovation-based companies** to help Portugal face the challenges of the future.

Medical Physics for Emerging Therapies

- The application of concepts and methods of physics to the diagnosis and treatment of pressing human diseases, as cancer.
- Fosters the establishment of new joint ventures among UT Austin's Dell Medical School and Cockrell School of Engineering, UT's MD Anderson Cancer Center, and Portuguese research groups in medical physics, proton therapies, and radiation oncology.
- Aligned with the national strategy for the development of high energy particle beam therapies for cancer treatment, this initiative intends to boost the advanced training of oncology radiology experts.

Open Call for Co-Promotion R&TD Projects - International Partnerships



1 Lead Company



2 entities of the Portuguese R&D system



CMU/MIT/UTA Research team

- Foster industrial research and experimental development activities
- Leading to the creation of new products, services, processes and systems
 - **22,8M€**
 - 3 years Project

Funding Companies may benefit from a maximum of 50% up to 85% co-funding, depending on certain criteria, and non-corporate organizations from the Portuguese Research and Innovation System from 100% funding.

Open Call for Co-Promotion R&TD Projects - International Partnerships



- Climate Science and Climate Change
 - Earth Systems
- Digital Transformation in Manufacturing
 - Sustainable Cities

Industrial research and experimental development activities, leading to the creation of new products, services, processes and systems

Contribution to consolidating the intergovernmental initiative "**Atlantic Interactions**" as well as the objectives of the UN Sustainable Development Goals

8 M€ for Portuguese entities , with project specific budgets between 1.5 and 2 M€

Use **data science** approach to address one or more of the topics

Open Call for Co-Promotion R&TD Projects - International Partnerships



ICT area

- Data Science and Engineering
- Artificial Intelligence, Machine Learning, Language Technologies, Data Analytics and Cloud Computing;
- Autonomy and Mobility;
- Design in a Variety of Societal Settings and Applications such as tourism, logistics or creative industries.

Industrial research and experimental development activities, leading to the creation of new products, services, processes and systems

Contribution to consolidating the intergovernmental initiative "**Atlantic Interactions**" as well as the objectives of the UN Sustainable Development Goals

5M€ up to 6.4M to Portuguese entities with an estimated budget of 1.25M per project

- Space-Earth interactions
- Medical Physics for Emerging Therapies
- Advanced Computing, Quantum Computing, Data Analysis and Visualization
 - Nano Materials for New Markets

Industrial research and experimental development activities, leading to the creation of new products, services, processes and systems

Contribution to consolidating the intergovernmental initiative "**Atlantic Interactions**" as well as the objectives of the UN Sustainable Development Goals

5 M€ for Portuguese entities , with project specific budgets up to 1.25M€

Medical Physics for Emerging Therapies Area

- Research in **medical physics and radiotherapy**, contributing to the development of advanced **cancer therapies**, in particular those based on **proton beam technology** (which will enable the treatment of tumors with high precision and efficacy reducing the manifestation of side effects for cancer patients).

Nano Materials for New Markets

- Projects involving engineering materials focused on the discovery and development of new Nano materials with a range of specific properties for applications including **medical diagnosis** and therapies



1 Lead Company



2 entities of the Portuguese R&D system



Exemples :
MD Anderson Cancer Center (MDACC)
Or
Dell Medical School (LiveStrong Cancer Institutes.)



MIT –Portugal

<https://www.mitportugal.org/>

CMU-Portugal

<https://www.cmuportugal.org/>

UTAustin Portugal

<https://utaustinportugal.org/>

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Thank you