

## Report to the President year ended June 30, 2024, MIT Portugal Program

The MIT Portugal Program is a multi-phase strategic international collaboration, launched in 2006 between MIT; Portuguese universities and research institutions; and the Portuguese Ministry of Science, Technology, and Higher Education. Program funding is provided by the Fundação para a Ciência e Tecnologia (FCT). The collaboration has evolved over a sequence of phases. In the first phase, partners focused on developing a research platform for cutting-edge concepts in emerging areas of science and technology including Bioengineering, Sustainable Energy, Transportation Systems, Engineering Design, and Advanced Manufacturing, as well as setting up PhD and (Executive) Masters programs to students from Portugal and around the world. In the second phase, which began in 2013, the research program continued with both large test bed projects and smaller research projects, as well as new entrepreneurship and innovation programs. The MIT Portugal Partnership 2030 (MPP2030) was launched in June 2018, not as a third phase, but as a novel strategic partnership between MIT and FCT. Building on the successes of phases one and two, MPP2030 continued to support joint research projects between individual faculty in the strategic areas of data science, climate science & climate change, earth systems: oceans to near space, digital transformation in manufacturing, and sustainable cities, designed to significantly impact the development of the Portuguese innovation ecosystem and workforce. MPP2030 also touched on MIT-strategic areas such as the environment, climate change, and manufacturing.

The last phase, MPP2030, concluded on December 31, 2023. In March 2024, FCT and MIT agreed to extend the collaboration until December 2024 to facilitate the start of discussions on the next phase of the program.

### Research and outreach activities

Collaborative research continued to be a cornerstone of the MIT Portugal Program. This year, new research projects were launched via MIT Portugal Program Seed Grants in the program's strategic research areas. The 3-year MPP2030 Flagship projects concluded this year.

*MIT Portugal Program Seed Grants* support innovative research projects that include collaboration with Portuguese researchers. This year, seed grants have been awarded to 16 new projects for 15 months, to researchers from across MIT. In addition, three existing seed projects have been extended and received additional funding to help finish the research.

*MPP2030 Flagship Projects* were part of a research and development initiative under FCT's international partnership with MIT, Carnegie Mellon University, and the University of Texas at Austin. The objective of the flagship projects was to promote the internationalization of Portuguese universities, research centers and companies, taking advantage of the experience and organizational culture of universities from the United States, specifically MIT. The MPP2030 flagship projects involved industrial research and experimental development activities, leading to the creation—or significant improvements in existing—products, services, processes, and systems. Seven three-year flagship projects that were awarded in 2020, concluded this year.

This year, MIT hosted five visiting students from Portuguese Universities as part of collaborative research projects between MIT and Portuguese researchers helping to strengthen collaboration and ties between MIT and Portuguese universities. In addition, MIT Portugal Program organized a visit of 40

Portuguese high school students from Portugal with an interest of applying to the US universities to tour MIT and its labs.

## Joint MIT Portugal Conferences and Events

The organization of academic conferences is a key collaborative activity that is essential to the program's objective of increasing engagement between Portuguese researchers and their counterparts at MIT. On September 22, 2023, the MIT Portugal Program hosted its annual conference at the Altice Forum in Braga, Portugal. The one-day event, themed "Research that Impacts Society," focused on the outcomes of the seven Flagship Projects, highlighting their contributions to scientific advancements within the program's strategic areas in Portugal.

MIT Portugal Program together with LSTS – Underwater Systems and Technology Laboratory (FEUP), and the University of Azores, organized a Marine Robotics Summer School which took place at Faial Island, in the Azores, between July 10 and 21. The course featured a packed program of hands-on activities including drifters design, AUV and ROV operations, and sea safety activities. 12 MIT students and 12 Portuguese students participated in the course.

On June 3 & 4, MIT Portugal Program hosted Fernando Alexandre, Portuguese Minister for Education, Science, and Innovation, and Antonio M. Cunha, President of the Norte Regional Coordination and Development Commission. Together with Pedro Arezes, National Director of MIT Portugal Program in Portugal, they met with MIT's senior leadership, engaged with MIT faculty involved in MPP, learned about MIT's innovation ecosystem, and toured several MIT labs.

From June 3-7, the program also organized the 2024 MIT Portugal Innovation Workshop at MIT campus. This hands-on program introduced 32 Portuguese students and researchers to the critical aspects of venture creation and the commercialization of high-impact research and technologies. The workshop featured seminars by both US and Portuguese innovators, entrepreneurs, and visionaries with firsthand experience. Fernando Alexandre, Portuguese Minister for Education, Science, and Innovation was a special guest speaker at the workshop.

## Program governance

The *MIT Portugal Program Governing Committee* has overseen the progress achieved by the cooperative activities between MIT and Portugal. The MIT Portugal Program Governing Committee members are Richard K. Lester, Japan Steel Industry Professor and Associate Provost for International Activities; Maria Zuber, E. A. Griswold Professor of Geophysics and Vice President for Research; Dava Newman, Apollo Program Professor of Astronautics and Director MIT Media Lab; Madalena Alves, President of the Board of Directors of FCT; António M. Cunha, President of Norte Portugal Regional Coordination and Development Commission; Isabel Furtado, CEO of TMG Automotive; and Paulo Ferrao, Professor at Instituto Superior Tecnico. The annual governing committee didn't meet during this period.

The *MIT Program Directors*, R. John Hansman, T. Wilson Professor of Aeronautics & Astronautics, and Douglas P. Hart, Professor of Mechanical Engineering, oversee the program's activities at MIT and coordinate with the *Portugal National Director*, Pedro Arezes, Professor Human Factors Engineering

University Minho. The MIT Portugal Program is supported by area leaders with expertise relevant to the program's thematic research areas. The area leader for digital transformation in manufacturing is John Hart, Professor of Mechanical Engineering; for sustainable cities is Christoph Reinhart, Professor of Architecture; for Earth Systems: Oceans to Near Space is John Leonard, Samuel C. Collins Professor of Mechanical and Ocean Engineering.

The MIT Portugal Program has coordination offices both at MIT and at the University of Minho, in Portugal. Both offices worked closely together in managing the program's joint activities. MIT Portugal Program staff at MIT consisted of Deliana Ernst, administrative lead, Natalie Billings, program coordinator, and Chrissy Mullin, financial administrator. The program has been headquartered in building 33.

In addition to the coordination with the MIT Portugal Program office in Portugal, the program staff at MIT has been responsible for managing the relationship with Portuguese collaborators, MIT Portugal Program's grant processes, and organization of joint activities. Further information can be found on the MIT Portugal Program [website](#).

**R. John Hansman**  
**Co-Director MIT Portugal Program**

**Douglas P. Hart**  
**Co-Director MIT Portugal Program**

**Deliana Ernst**  
**Administrative lead, MIT Portugal Program**