

Empretec Women in Business Awards
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Brazil

Maria Eduarda Franklin da Costa de Paula

CEO & Co-founder, Orby

Rua Doutor Luiz Felipe Câmara, 55

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"I have been a scientist since I was 14 years old. I have always dreamed of changing the world and transforming lives through science, reaching those who really need it."

Maria Eduarda incorporated her venture in 2022 to develop high-tech solutions for functional musculoskeletal rehabilitation using Artificial Intelligence (AI). Functional electrical stimulation is what can facilitate the contraction of paralyzed and weakened muscles, as a result of damage to the brain or spinal cord. It is estimated that, only in Brazil, 14 million people could benefit from this therapy. However, existing solutions are quite expensive and success rate is still low.

Her idea of creating an integrated platform to monitor rehabilitation processes turned into something concrete, after winning with her team an award for the Health and Well-being category (United Nations Sustainable Development Goal 3) at the largest hackathon in Latin America, *Hacking Rio 2021*.

The platform, named Ortech, links connectivity stimulator devices and sensors through Wi-Fi and Bluetooth. It also collects and integrates data management to monitor rehabilitation processes, offering therapists access to a comprehensive set of information about the patient's health and progress. Ortech has achieved a Technology Readiness Level (TRL) of 6 out of 9, and it is being pilot tested for the next level at Santos Dumont Institute.

Orby intends to enter the neuromodulation market by targeting rehabilitation clinics and hospitals as potential direct customers, and physiotherapists as final users. In addition to integrating devices, data and AI, the platform aims to optimize rehabilitation time, reduce costs, achieve scalability, and improve user and data management.



Maria Eduarda and two other co-founders lead a team of 10 collaborators across software development, hardware and design areas. Orby has gone through mentoring and national incubator and accelerator programmes, and it aims now to participate in the Y Combinator, a world leading technology start-up accelerator located in Silicon Valley.

Before being exposed to Empretec, Maria Eduarda admits that Orby did not have an entrepreneurial vision. It was in the course of last year that Maria Eduarda and the other co-founders were able to expand their vision as a company, preparing a business plan and benefiting from accelerator programs, such as InovAtiva, the largest acceleration program in Latin America. In the meantime, Orby continued to participate, and win awards, in the *HackBrazil* competition and Google for Startups.

Maria Eduarda considers that the best skills she learned from Empretec were resilience and structured critical thinking, which allowed her to prepare a well-defined plan for Orby. As an entrepreneur, she is focused and persistent, with a very well-designed roadmap that charts the way for her company and the team. In the next couple of years, Orby's goal is to emerge as one of the best Brazilian companies in the neuromodulation market, entering into commercial agreements with health institutions in Brazil, in the US and Europe.