




hu
no
va

The new era of rehabilitation is now



Are you looking to
improve your
rehab process?

Would you like to
measure the
outcome and trace
the rehabilitation
progress?



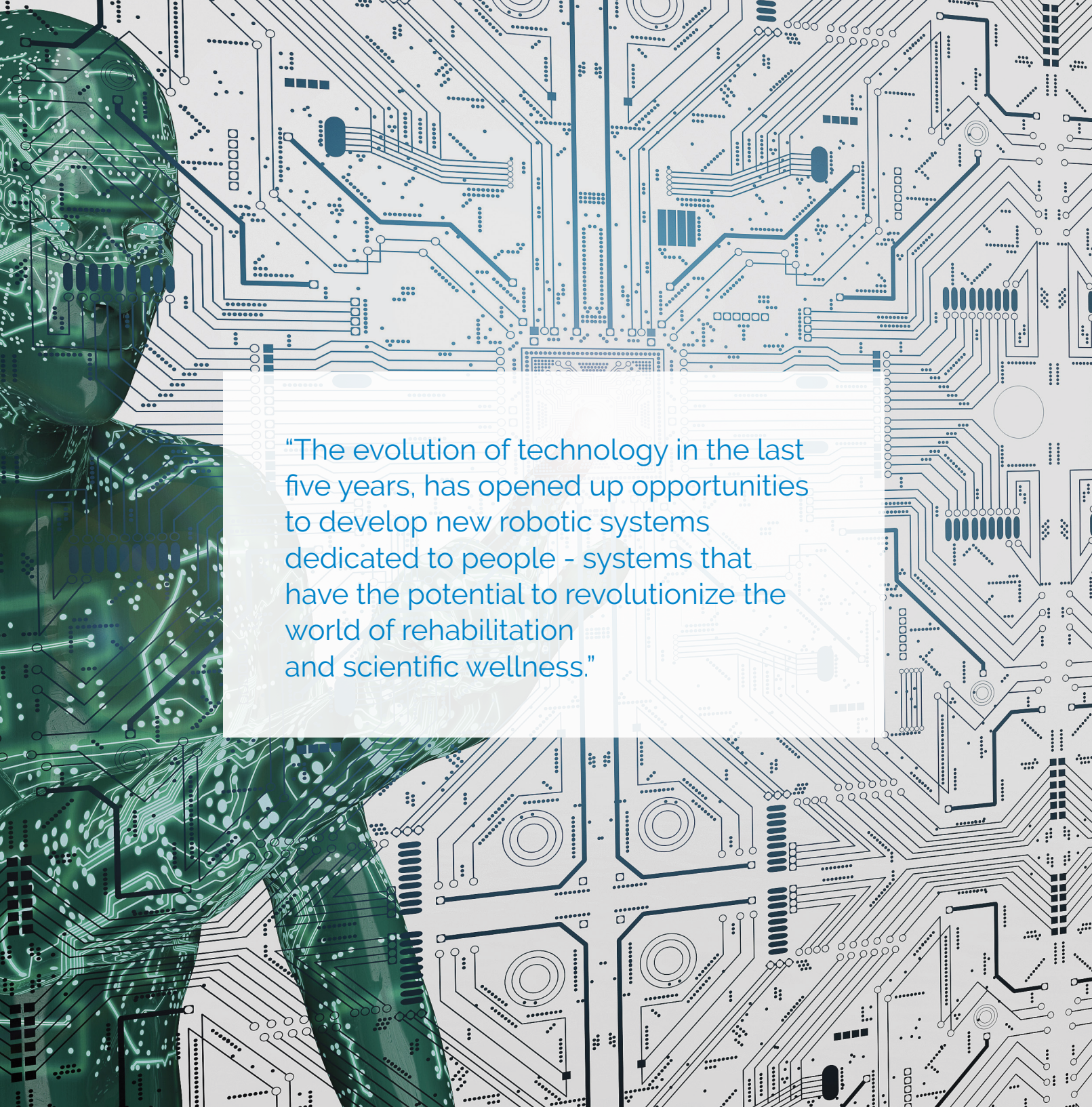
Do you value to involve
the patients more
during the session?

Would you like
to present the
exercises as a
game?

The robotic rehabilitation system
that supports doctors, physiotherapists,
and patients throughout
the course of treatment.

What is hunova

hunova is a robotic system designed in
response to a clinical need for objective
evaluation and rehabilitation treatment tools
that support doctors, physiotherapists,
and patients throughout the course
of treatment and recovery.



“The evolution of technology in the last five years, has opened up opportunities to develop new robotic systems dedicated to people - systems that have the potential to revolutionize the world of rehabilitation and scientific wellness.”



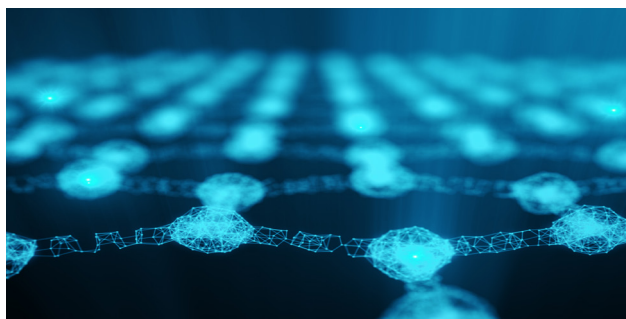
Simone Ungaro

CEO and Co-founder of Movendo Technology

“I have invested the last ten years of my professional life to building and developing the Istituto Italiano di Tecnologia (IIT), a leading global center for applied technology. Humanoid robotics is the most important area where IIT has proved its excellence, recognized by the top research institutes and consortia around the globe.”

The evolution of technology in the last five years, has opened up opportunities to develop new robotic systems dedicated to people - systems that have the potential to revolutionize the world of rehabilitation and scientific wellness.

A group of directors at IIT decided to take on a stimulating new challenge: to bring this technology to market. They decided to found an innovative medical company with the help from an investor in the world of biopharma. We've named this company Movendo Technology.”



The origins of Movendo Technology

IIT and Dompé farmaceutici

The Istituto Italiano di Tecnologia (www.iit.it) IIT - the leading Italian institute in the field of robotics and many other areas, such as nanotechnology, neurosciences, drug research and development, renewable energy, graphene, and computation - strives to promote excellence in basic and applied research and to improve human quality of life.

1500

total staff

44%

scientific staff
from abroad

150

European projects

500+

active patent
applications

50+

represented countries

8569

publications

17


ERC projects
(European Research Council)

Movendo Technology was founded through financing from Sergio Dompé of the Dompé farmaceutici group, one of the leading Italian biopharma companies.

Dompé farmaceutici focuses on innovation, where a long tradition in the field of healthcare goes hand in hand with a commitment

to research and development, to meet unsatisfied therapeutic needs.

A challenge that the Company has pursued with passion, expertise and courage, to make a difference to people's lives around the globe.



The objective is to develop innovative technologies Made in Italy, ranging from the excellence in research and a new way to conceive rehabilitation.



Movendo Technology

The development of clinical technology

Movendo Technology develops medical devices that use the most advanced technologies and are, at the same time, effective, simple to use, and easy to interact with. They are created in Italy with the taste for aesthetics, design and functionality that distinguishes our country.

Movendo Technology positions the patient at the center of the technological development, while helping the clinician to understand the actual rehabilitation needs. It is only thanks to the close collaboration and synergy with excellent clinical partners that we are able to combine ease of use with the immediate inclusion in the everyday clinical activity. The encounter between Movendo Technology and the clinical world has led to the creation of the first robotic aid for physiotherapy: **hunova**.



hunova

Robotic rehabilitation system

hunova is an intuitive and easy to use robotic aid for physiotherapists, dedicated to the rehabilitation in orthopedics, neurology and geriatrics.

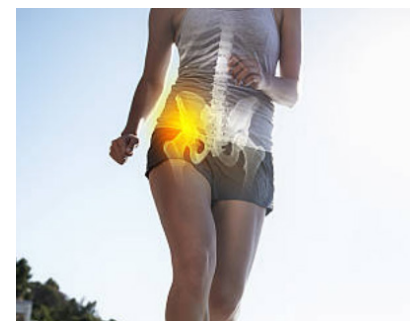
" Intended use: hunova is a device for the rehabilitation and functional sensory-motor evaluation of lower limbs and torso. In particular, it is designed for use in orthopedics, neurology and geriatrics."





Orthopedic applications

In the orthopedic sector, **hunova** is used for the rehabilitation of **ankle, knee, hip** and **lumbar region** of the spine, making the patient carry out passive mobilization exercises, muscle strengthening, proprioceptive exercises and postural and balance control. The device is also used for sports rehabilitation.



Geriatric applications

In the geriatric field, **hunova** enables the physiotherapist to work on postural control, proprioception and balance, and it is used to prevent and evaluate the risk of falls in the elderly and the recovery of cognitive aspects.





Neurological applications

In the neurological area, **hunova** is used for post-stroke functional re-education, for the treatment of degenerative diseases of the central nervous system and lesions of the peripheral nervous system, providing exercises of postural control, balance, core stability and proprioception.



hunova integrates evaluation and rehabilitation in an homogeneous path to monitor improvements in real time during the therapy.

Rehabilitation path

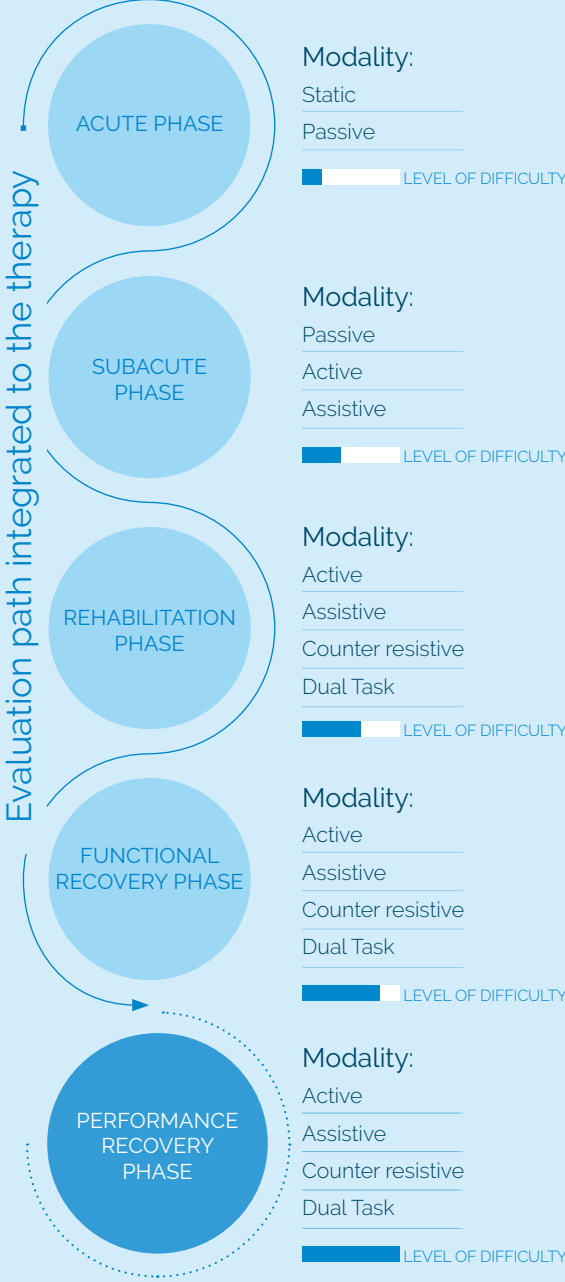
Protocols

hunova allows for:

- The use of standardized protocols developed from international guidelines, combining more than 200 exercises from various applications (orthopedics, geriatrics, neurology).
- The modification of standard protocols to be adapted to specific applications
- The creation of personalized protocols for the needs of each facility

Personalized rehabilitation

hunova enables the operator to select the difficulty level of the protocol in an accurate and simple way, in order to adapt the therapy to each patient's abilities.



Report

The **rehabilitation process** is integrated with an **evaluation path** to record and monitor the clinical situation of the patient, thus supplying objective reports throughout the therapy.

*"If you can't measure it,
you can't improve it"*

Peter Drucker

Reaction time
measurement

Robotic seat's
force sensor

Robotic
platform's
force sensor



1. Adjustable touch screen
2. Tablet for remote control and operation of hunova
3. Emergency button
4. Wireless position sensor
5. Adjustable and removable armrests, removable backrest
6. Sensorized robotic seat
7. Sensorized robotic platform
8. 3D seat position adjustment

! Characteristics subject to change without notice.

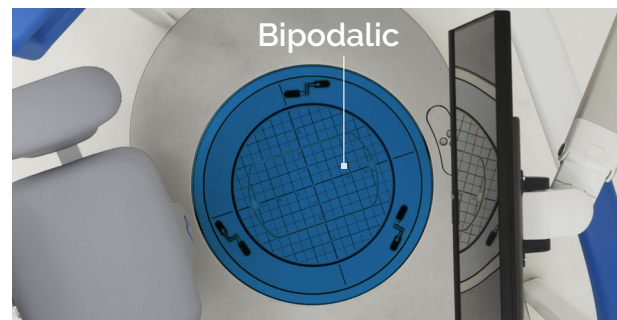
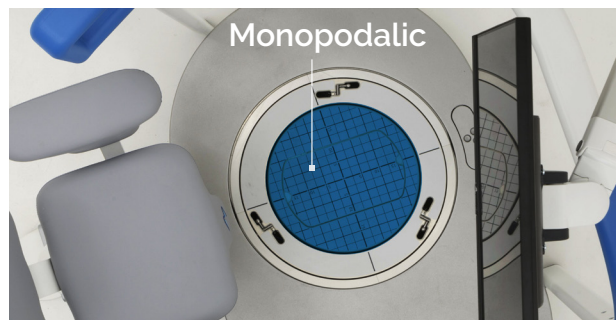


*"Measure what is measurable,
and make measurable what is
not so."*

Galileo Galilei



Scan the QR code to know
more about hunova



hunova configurations

The accessories allow the physiotherapist to isolate the individual body districts and to work with exercises of active, passive or assisted mobilization, strengthening and stretching. With **hunova** it is possible to perform exercises in the seated position, or in the standing position, in either mono - or bipodalic mode, with precise load control.

Monopodal and bipodalic platform

The monopodal platform allows to reach a range of motion, suitable for the ankle articulation. The bipodal platform allows for a wider working space, suitable for the double support which improves the postural attitude and encourages overall muscular recruitment.



Gaming

Within the rehabilitation process, depending on the exercise, the patient controls with the different parts of their body (ankle, knee, pelvis, trunk) the avatars generated on the screen, in different gaming modes and versions. This makes rehabilitation an entertaining activity which motivates and amuses the patient.



Biofeedback and dual task

The biofeedback, generated at visual, auditory and proprioceptive levels, allows the development of a voluntary motor response that highly improves the training process. By using gaming exercises, **hunova** encourages

patients to beat their previous goals and scores, accelerating their recovery and turning therapy into a playful activity.



What they say about us

"hunova represents an innovation and revolutionizes rehabilitation [...]. Finally physiotherapists can use an instrument [...] which makes rehabilitation more objective and measurable, thus allowing to personalize the intervention and make the rehabilitation more effective."

Dr. Mariuccia Rossini, Head of Korian Group, Italian division

"Rehabilitation with hunova makes it possible for the physiotherapist to personalize protocols for the patient, thus quickening and improving the re-education results and maintaining the same relationship between physiotherapist and patient, which is crucial in our center as we place the patient at the center of the humanization process of care."

Dr. Alessandra Mellano, CEO of Chiros Centro Fisioterapeutico e Riabilitativo s.r.l.

"Time is precious! The first sensation I have had, which was then confirmed after using hunova, was the possibility to obtain maximum rehabilitation results in a very short period of time, thanks to the device's high compliance."

The robot versatility in regards to the

patients allows to treat everybody from the professional athlete to the geriatric patient, all in an entertaining circumstance, very pleasing to the users. "

Dr. Giovanni Bei, Head of Rehabilitation of Korian Villa delle Terme

"It is an exceptional device that makes it possible to rehabilitate the patient also from a seated position. Another characteristic is the informatic precision which allows to set up an objective profile of the patient. It's an amazing integration between technology and the doctor's clinical eye."

Dr. Giovanni Pietro Salvi, Head of Rehabilitation Operational Unit of the Istituto Clinico Quarenghi

"An efficient ally of our rehabilitation équipe for a faster and complete achievement of the results set, but also a valid instrument for the evaluation of results and the rehabilitation of each patient, which can then be monitored by the medical and physiotherapy staff."

Dr. Angela Superchi, Chief Medical Officer of Casa di Cura Privata le Terrazze





Join
Movendo Technology
Scientific Network



Movendo Technology Srl
Via Bombrini 13/10 - 16149 Genova, Italy
Email: info@movendo.technology Tel: +39 010 0995700

FDA listed



hunova
the new era in r=habi itation

ADI index

HNOV1BR1EN0623