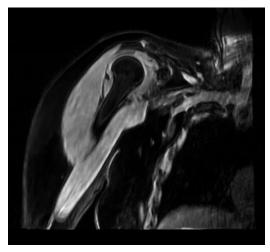
Corsmed collaborated with Poliambulatorio Arcella in Padua to acquire data from the 'Oasis Velocity' Open High Field Total-Body MRI for the study and realization of a realistic anatomical model of the human body - digital patient or digital twin - for the true MRI simulator.



On the picture from left to right: Poliambulatorio Arcella: Luca Rubalteli – CEO, Michele Toffanin - MRI technologist; Corsmed: Alexis Reymbaut – Senior MRI software Engineer, Alice Radaelli – Senior Software Engineer



Data acquired with Fujifilm Velocity Oasis



FS TSE image acquired with Corsmed True MRI simulator

About Corsmed

Corsmed AB is a Swedish high-tech company with a specific focus on Magnetic Resonance Imaging, founded as a spin-off from Lund University. Selected as one of the 20 deep tech scaleups in Europe*. Corsmed has developed a true MRI simulator for training, education and assessment. The simulator works in the same way a real MRI scanner. Using simulation offers a great possibility for hands-on practice to improve and enhance MRI knowledge.

Corsmed's True MRI simulator computes, simulates and measures the MR-signal for each spin, within every voxel, for the selected anatomical volume, for each time step of the pulse sequence. That measurement represents the evolution of the MR-signal throughout the application of the pulse sequence, which is then used to construct the K-space (raw data), and from that reconstruct the MR image (through an inverse Fourier transform). As such, we should expect that if one enters the same inputs (parameter, patient, sequence, etc.) into a real scanner and into Corsmed's True MRI simulator, the true MRI simulator will return the same resulting image as a real scanner (this includes FOV, image position, resolution, scan-time, SNR, contrast, SAR, artifacts, etc.). The Platform also includes an Education Management System which has pre-prepared courses, modules about MRI physics, artifacts and anatomy for education, training and assessment. It also offers to possibility to set up your own courses and materials with your specific content.



The Outpatient Clinic Arcella is a healthcare facility of excellence where preventive, diagnostic, curative and re-educational services are performed at the service of those who wish to keep their state of fitness monitored or who are faced with a health problem.

Today's multi-specialist outpatient clinic originates from the pre-existing Arcella Treatment Centre, one of the best-known landmarks on the Padua health care scene since 1920, which was updated and renovated in the early 1970s to become a state-of-the-art outpatient clinic accredited by the Veneto Region and affiliated with the National Health Service.

Now, Poliambulatorio Arcella is committed to keeping alive the link with the great tradition of Paduan Medicine through the presence in a single location of the main medical specialties, the Radiology department with the most advanced Imaging Diagnostic systems, Physical and Rehabilitation Medicine and Sports Medicine sector that is always in step with the latest technological, diagnostic and management innovations. This allows the team of our Specialists and Professionals to structure and implement an efficient, complete and customized patient care, in line with the continuous updating of the healthcare hub, to offer the patient the best care and treatment experience.

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^{*} https://www.eitdigital.eu/newsroom/news/2023/deep-tech-pioneers-scaleups-finalists-of-eit-digital-challenge-announced/?utm_campaign=Oktopost-Challenge+2023&utm_content=Oktopost-LinkedIn&utm_medium=social&utm_source=LinkedIn