# Meet Siemens Healthineers

Siemens Healthineers: Our brand name embodies the pioneering spirit and engineering expertise that is unique in the healthcare industry. The people working for Siemens Healthineers are totally committed to the company they work for, and are passionate about their technology. In this section we introduce you to colleagues from all over the world – people who put their hearts into what they do.

## Daniel Polak, Ph.D.

Daniel Polak holds a B.Sc. and an M.Sc. in physics from Technische Universität Darmstadt and Heidelberg University. He pursued his Ph.D. with direct support from Siemens Healthineers MR in Erlangen, Germany. During his master's and Ph.D. studies, Daniel completed research appointments at both Harvard Medical School and the Massachusetts Institute of Technology (MIT) in Boston, MA, USA. Through these collaborative research experiences, Daniel established a broad network of professional relationships in the United States that continue to shape his career. After earning his doctorate, Daniel joined the global Siemens Neuro pre-development team, where he led the development of a retrospective motion-correction technique for brain MRI. This technology — BioMatrix Motion Sensor — was launched as part of the MAGNETOM Cima.X platform, in which it contributes to improved image quality and clinical reliability in neuroimaging. In 2025, Daniel transitioned to the U.S. organization at Siemens Healthineers as a senior key expert scientist, supporting a newly established portfolio of collaborative neuroimaging projects with Stanford University. In this role, he continues to bridge innovative research and clinical translation, strengthening new partnerships and advancing next-generation MRI technologies.


**How did you first come into contact with MRI?**
My first experience with MRI was for my master's thesis, while visiting the Athinoula A. Martinos Center for Biomedical Imaging in Boston. Working in such a vibrant and fast-paced academic environment was both challenging and inspiring. I was fortunate to receive exceptional mentorship that not only shaped my technical expertise but also inspired my scientific thinking. Only a few months into my research project, I had the opportunity to attend the ISMRM annual scientific meeting in Singapore. Engaging with researchers from around the world and witnessing the breadth of innovation in MRI deepened my enthusiasm for the biomedical imaging field. These experiences ultimately inspired me to pursue a Ph.D. and continue building my career in MRI research.

**What are the most important developments in healthcare?**
In medicine today, imaging plays an increasingly central role — not only in diagnosis, but also in monitoring disease progression and guiding emerging treatment options, for example in Alzheimer's disease. As a result, the number of procedures is rising worldwide and this trend is expected to accelerate further due to individualized treatments and an aging population. At the same time, healthcare systems face growing pressure from workforce shortages and declining reimbursement rates. Technology providers can help address these challenges by delivering intelligent solutions that support the entire patient workflow — from patient preparation and image acquisition to interpretation and reporting. I have contributed to the development of advanced MRI techniques designed to make scans more robust and reproducible. One recent example is a method that corrects for patient motion artifacts. Such innovations are particularly valuable for pediatric and elderly patients, who are often the most likely to move during scans. However, this is only one piece of a much larger puzzle. Looking ahead, a broad range of advanced algorithms and workflow-integrated tools will be essential to meaningfully support clinical practice — and will ultimately enhance efficiency, diagnostic confidence, and patient outcomes.

**What would you do if you could spend a month doing whatever you wanted?**
Having recently moved into a role where I support our research collaboration with Stanford University, I've begun an exciting new chapter in my career. I am exactly where I want to be, both professionally and personally. I have the privilege of working closely with professors and students on a wide range of cutting-edge research topics, expanding my expertise beyond neuroimaging and gaining valuable insights across multiple areas of radiology. I truly appreciate the close partnership and how warmly Stanford has welcomed me into its academic community. Being embedded in such an intellectually inspiring environment is deeply motivating.

Living in Silicon Valley adds yet another dynamic dimension. Experiencing the future of technology first-hand — from the latest advances in artificial intelligence to autonomous vehicles and robotics — fuels my curiosity and drive. At the same time, I cherish the Bay Area lifestyle. The Mediterranean climate means I can play tennis outdoors even in winter. I also have breathtaking nature right on my doorstep, so I can easily go on scenic hikes, enjoy the ocean views, and take weekend trips to California's amazing national parks.