

Aurélien Stalder

Aurélien Stalder is from Geneva, in the French-speaking part of Switzerland and has joint French and Swiss citizenship. He graduated in micro-engineering from EPFL in Lausanne, Switzerland in 2005. He then studied for his Ph.D. in the field of 4D Flow MRI at the University of Freiburg, Germany. In 2009, he was awarded an EU Science and Technology Fellowship to undertake a two-year post-doctoral research program at the Xuanwu Hospital in Beijing, China. Aurélien joined Siemens in 2011, as application developer in Erlangen and participated in the predevelopment of some new key technologies such as quiet MRI or compressed sensing MRI. Based on his extensive knowledge of the MRI research and of the academic world in China, he took over the lead of the Siemens Healthineers MR Collaboration team for Greater China in 2015.



Shanghai, China



How did you first come in contact with MRI?

Following my master's thesis in image processing, I was looking for a Ph.D. position in biomedical imaging. Michael Markl introduced me to the exciting research work on 4D Flow MRI that he was leading in Freiburg within the Jürgen Hennig group. I was captivated by the possibilities offered by MR and delighted to join their team.

What fascinates you most about MRI?

The incredible quantity of information and imaging contrasts that MR can produce both for anatomy and function. The possibilities seem endless, and the research community keeps working to improve existing MR contrast mechanisms and discover new ones. For me, this really makes MRI stand out among all other imaging modalities.

What do you think are the most important developments in Healthcare?

We are moving toward the integration of all possible sources of patient data and information to provide the best patient screening, diagnostic, and treatment. Artificial intelligence will play a key role in helping radiologists and doctors integrate this growing quantity of information. I believe that MRI will play a central role here due to the vast range of image contrasts and the quantitative information it can produce, while being non-invasive and radiation-free.

What motivates you most about your job?

Each day I meet people that share the same passion for MRI. My heart is with MRI so I may be biased, but I see no other modality where people share such a strong fascination for the technology they use. It is a passion that crosses many borders, shared by clinicians, engineers, technicians, and physicists. The commitment that I see from our collaboration partners in China is incredible. Some are still developing their research experience, but they work hard – often alongside the collaboration scientists in my team – to bring MRI to the next step!

What are the biggest challenges in your job?

First and foremost, communications! And here I also include intercultural aspects. Everyone – no matter what their mother tongue is – express themselves differently due to our cultural differences, which is important to understand and respect. The role of my team is to act as the interface between MR research sites in greater China, Siemens Healthcare in China, and the predevelopment and R&D teams in our headquarter in Erlangen, Germany. For our projects it is very important that, for example, a developer in Germany understands the goals of a Chinese doctor and vice-versa. I have lived in China for over 3 years now (2 years for my post-doc, 1.5 years in my current role) and speak decent Chinese; this helps me a lot to understand what our Chinese partners expect.

What would you do, if you could do for one month whatever you wanted?

Like every Healthineer, I would like to spend time in a clinical setting. Learning more about the daily clinical routine and the important clinical challenges. Although I visit customers almost every week, I feel that there is always more to learn.

However, if I had this free time now, I would probably travel through Europe with my fiancé. I would love to have the time to travel by bike and visit our friends all over Europe. I like very much traveling and I have been to many countries already. When I lived in Switzerland or Germany, I often travelled to exotic destinations, such as China. Now, living in China, where everything moves at an incredible pace, it would be a great contrast to take the time to travel at a slower pace through Europe.