Zhang Le, Ph.D.

My name is Zhang Le, and I'm a protocol developer with Siemens Shenzhen Magnetic Resonance Ltd. (SSMR). I gained a bachelor's degree in clinical medicine in 2003 and completed my doctorate in biomedical engineering five years later, in 2008. Then, I spent two years as a resident at the First Affiliated Hospital of Zhengzhou University, which might be the biggest hospital worldwide with diverse patient resources. Since 2010, I have been working for SSMR as a protocol developer.



Shenzen, China



How did you first come into contact with MRI?

My first exposure to MRI can be traced back to my internship in the first year of my bachelor's degree at medical school in 1998. The freshmen were required to visit each department in the teaching hospital to learn about clinical routine. It was the first time that I observed so many detailed anatomical structures in the human body on a scan, and I noticed that all the images of good quality were from the Siemens 1.0T system. I was so deeply impressed by MRI and Siemens that they have stuck in my mind ever since. Of course, more than 20 years later, the current performance of MRI systems from Siemens Healthineers is much more impressive than at that time, including our 0.55T MAGNETOM Free.Max system.:-)

What do you find most fascinating about MRI?

I'm always impressed by the wonderful ability of MRI to visualize anatomical structures. However, the most fascinating thing is the cooperation in a multidisciplinary working environment. MRI development is, without a doubt, a huge interdisciplinary project. From hardware components to software and application, from factory to customer sites in global marketing, the work of numerous colleagues makes it all possible. I enjoy the sparks of inspiration that come from the different thoughts of people with differing educational backgrounds. Thanks to all of you, I have learned a lot from our cooperation, and I believe I can learn more in the future.

What role do you play in MRI development, and how does application development work, particularly in the context of such a novel platform as MAGNETOM Free.Max?

As a protocol developer, from my point of view, I take the customer's perspective and play the part of a bridge between the customers and developers. That's the importance of my role in MRI development. Thanks to my experience at medical school and working at a teaching hospital, I am able to communicate easily and effectively with all kinds of medical staff. I understand their real needs. Thanks to my experience during my Ph.D. research

and from almost 10 years' working in the Siemens Healthineers family, I know how to work together with colleagues from multidisciplinary backgrounds efficiently. Certainly, protocol optimization is a very useful tool or even an essential skill in my work. I usually have to integrate all types of knowledge, tools, and skills, to evaluate whether the system will meet our customer's requirements. At the same time, I also need to try my best to overcome all kinds of potential problems and/or limitations. The final output of my job is well-balanced protocol parameters and workflows for each project and product. I always hope that this output provides a good starting point and a platform for our application specialists and customers to explore the beauty of MRI. MRI is also far more accessible now than it was before. I believe our MAGNETOM Free.Max system will accelerate this process significantly thanks to the novel platform.

What do you find most motivating about your job?

As I mentioned before, working in a multidisciplinary environment is the most motivating thing about my job. At the same time, the Siemens Healthineers family gives me the sense of belonging, which also drives me to do my best to make my work better and better. Of course, the great sense of accomplishment when one project is finished is another reward of my job.

If you could do anything you wanted for a month (at work and privately) what would it be?

A road trip to explore the high mountains of Tibet would be my number one choice if I really could take a one-month vacation. Similarly, I'd also enjoy visiting the Alps. I love mountains and cannot help thinking about our high-quality MR images when I look at the curves and outlines of mountains. They share the beauties of lines and anatomies, both of which are so awesome. It would be perfect if I could enjoy this wonderful time with my wife and young son. They love and support me all the time. Since my wife is a busy gynecologist, a long vacation would be something really precious. I'm sure she would really enjoy it!