George Ferguson

After completing 10 years in the military where I had the opportunity to also specialize in MRI, I was fortunate enough to become an MR technologist at a fast-paced trauma facility. I gained experience in all forms of MR imaging exams and procedures. I then had the opportunity to become an applications specialist covering from Japan to New York where I continued my growth in the field or MRI assisting other users with our platforms that brought new features and hardware into their facilities. After several years as an applications specialist, I was accepted to become an applications developer for all field strengths up to 3T. This background gave me a good foundation to bring then all that gained knowledge to the ultra-high field (UHF) team as a UHF MSK applications developer. I enjoy making a positive difference in the lives of those in need, and in pain requiring medical care. It is my passion to be a part of ensuring that they receive the best care possible.

Erlangen, Germany

How did you first come into contact with MRI?
MRI was just something that landed into my lap by being in the right place at the right time. I was working as a lead sonographer, senior radiographer, and CT technologist, when the opportunity to learn MRI after normal working hours presented itself at a local imaging clinic. My first exams in MRI were on an open 0.3T magnet. I then relocated and ended up being a full time MRI technologist in a trauma hospital scanning the most critical and sick patients imaginable.

What do you find motivating about your job?
The idea of reshaping the entire landscape of medicine as we know it for a zero delay of diagnosis and treatment followed with the fastest recovery times possible are my motivation.

Here the value of collaboration comes into play: Making solutions robust enough for the future, by bringing professionals with different insights to the same problem, you can create more robust solutions which enable our patient care partners to provide the best care possible. This robustness is the only way we will keep our users believing in our products as they rely on them to work when they are depended on the most.

What are the biggest challenges in your job?
At the moment I consider creating products that are the perfect solution into the product line as the most challenging aspect. To explain why I say this we would need to evaluate what and to who defines the idea of the perfect solution. Is it a perfect solution for only the patient? The technologist for ease of use? The radiologist with cost of purchase/ownership/throughput considerations? Is it for the administrator of the hospital with total patient care cost considerations? Sometimes these are not all in alignment and it can be quite challenging to find the right set of compromises to align all these different factors for a meaningful product while navigating the intricacies of project readiness and timelines.

The challenges of application development at 7T are due to the physics of 7T. As you increase the field strength you increase the chemical shift, and the B_1 effects in the image impression. Additionally, the specific absorption rate (SAR) becomes much more of a factor in measurement times compared to other field strengths. So, it can be tricky if the solutions to the image quality challenges increase the SAR challenge even more.

What are the most important developments in Healthcare?
The most important developments in healthcare are just now beginning and at a very early stage. Since the foundation is being laid down now for the most important advancements in healthcare, that foundation will need to be done with absolute robustness and in a rapid manner to secure our position in the market in the future.

What would you do if you could spend a month doing whatever you wanted?
I would go camping in a large camper parked as close to the ocean with the largest waves as possible. A large panoramic view of crashing waves surrounded by nature.