

FESSH Research Fellowship Report – Zurich, Switzerland 2026

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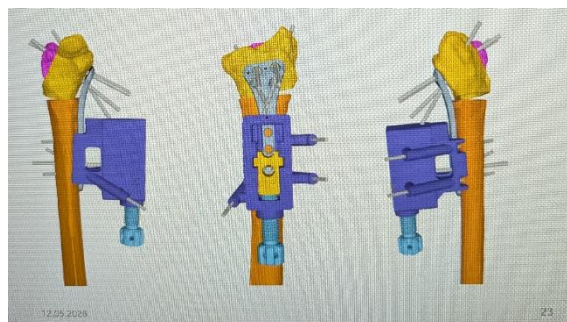
Motivation for Applying

I am currently in the final phase of my PhD project, with the aim of defending my thesis in January 2027. Throughout my doctoral training, I have developed a strong interest in clinical and translational research and am now actively planning future research projects beyond my PhD.

My department has a particular focus on 3D planning technologies and regularly performs small joint arthroplasty procedures. For this reason, the opportunity to visit Zurich—a centre with internationally recognised expertise in 3D planning, motion analysis, and clinical research infrastructure—was an ideal match for my interests. The fellowship offered a unique opportunity to gain insight into advanced research methodologies, explore potential future collaborations, and learn from leading experts in the field of hand surgery.

Day 1 – Balgrist University Hospital

The fellowship began at Balgrist University Hospital, where I had the opportunity to assist Professor Andreas Schweizer during a double corrective osteotomy of the distal radius. The discussions throughout the procedure provided valuable insights into the practical application of 3D planning in complex reconstructive surgery. Professor Schweizer generously shared technical details, decision-making strategies, and practical tips that can only be acquired through extensive clinical experience.



Later in the day, I observed Ms Reissner treating a challenging PIP joint fracture using a custom-made 3D printed external fixation device. This demonstrated an example of combining innovation and in house possibilities for 3D printed solutions.



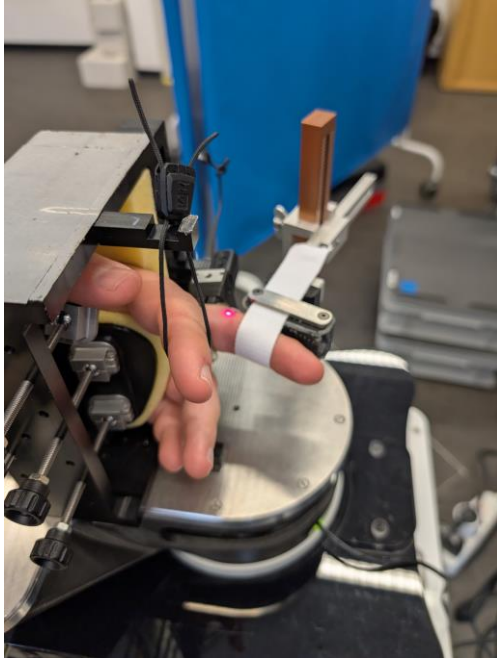
In the afternoon, Mauro Maniglio guided us through the Balgrist campus and its impressive research facilities. We met the engineers working in the 3D laboratory and discussed ongoing projects, including the application of ultra-high-field 7-Tesla MRI for wrist imaging. It was particularly inspiring to see the close collaboration between clinicians, engineers, and researchers, creating an environment where innovative ideas can rapidly be translated into clinical practice.

The day concluded with a departmental dinner, providing an excellent opportunity for further discussions and networking in an informal setting.



Day 2 – Hand Motion Analysis Laboratory, University Hospital Zurich

The second day was dedicated to the Hand Motion Analysis Laboratory at the University Hospital Zurich, led by Gabriella Fischer. This visit was particularly inspiring, as dedicated laboratories for hand motion analysis remain rare worldwide.



We were introduced to the laboratory setup, data acquisition systems, and the numerous methodological challenges involved in accurately measuring hand and finger motion. Particular emphasis was placed on practical considerations, potential pitfalls, and solutions developed through years of experience.

In addition to learning about the historical development of the laboratory, we observed a study participant undergoing motion analysis assessment. The visit highlighted the significant potential of motion analysis as both a research and clinical tool and provided valuable ideas for future projects involving objective functional outcome measurements.

Days 3–4 – Schulthess Clinic Research Department

The final two days were spent at the Schulthess Clinic with Ms Miriam Marks and the research department. This part of the fellowship provided a comprehensive understanding of how a highly successful clinical research organisation is structured and integrated into everyday clinical practice.

One of the most impressive aspects was the development and maintenance of local clinical registries. Through close collaboration between clinicians and researchers, these registries serve not only as powerful research tools but also as instruments for continuous quality improvement and outcome monitoring.

Ms Marks provided detailed insight into the organisational structure, workflow, implementation strategies, and practical challenges associated with establishing and maintaining a high-quality registry. These discussions were particularly relevant to my future research plans and offered valuable ideas that could potentially be adapted and implemented within my own institution.



Impact of the Fellowship

This fellowship provided far more than observational experience. It offered direct exposure to different models of integrating clinical work, research, engineering, and technological innovation within hand surgery.

Equally important was the opportunity to establish personal connections with experts working in these highly specialised fields. Beyond learning about the technologies and methodologies themselves, I was able to meet the people behind them and gain direct access to their expertise and experience. As I develop future research projects, these contacts will be invaluable sources of advice, collaboration, and scientific exchange.

As I approach the completion of my PhD and begin planning the next stage of my academic career, the fellowship has helped clarify several future research directions and has provided inspiration for developing new projects and collaborations.

Acknowledgements

I would like to express my sincere gratitude to FESSH for awarding me this Research Fellowship and for providing this exceptional opportunity. The visit allowed me to learn from internationally recognised experts and gain first-hand experience of several world-leading research environments.

I would also like to extend my special thanks to Ms Miriam Marks and Ms Reissner for organising such a well-structured and rewarding programme. Their efforts, together with the generosity of all colleagues who shared their expertise and experience, made this fellowship an invaluable experience that will have a lasting impact on my future clinical and academic work.