

## Scientific outcome

Michela

*The aim of our project was to evaluate at UZ Ghent the usability of AVF.SIM, a system developed in Mario Negri Institute (Bergamo, Italy) to predict the outcome of arteriovenous fistula, the preferred vascular access for hemodialysis. Briefly, our system includes a computational model to predict the effect of different fistula type and location in terms of changes in access blood flow volume, venous and arterial diameters that develop after arteriovenous fistula maturation, starting from demographic information, clinical data and US measurements collected pre-operatively. Clinical use of AVF.SIM may help the surgeon to select the best surgical strategy, reducing early failures and complications and improving the clinical outcome.*

*My visit to UZ Ghent allowed moving to a European scenario and involving Floris, a young nephrologist. During my visit we assured a correct application of the ultrasound protocol, we performed simulations of five patients in real time and discussed preliminary results of predicted fistula flows. We also presented the project to vascular surgeons and nephrologists, who were enthusiastic about the collaboration between our two institutions.*

## Interdisciplinary and social outcome

Michela

*My time at UZ Ghent was really awesome, I shared with Floris some technical methods for US measurements, I learnt clinical tests that are very useful during fistula planning and it was really interesting to understand how they organize fistula planning and surgery and how they treat cases of fistula non function in UZ Ghent. I found a friendly environment in the Hospital and my week there passed too fast! I'm now waiting Floris's visit in Bergamo to discuss with him the agreement between flows predicted with our system and those he measured using US after fistula maturation and also have his feedback about the usability of AVF.SIM.*

*Beside the working activities, I had the privilege of being hosted by the wonderful family of Floris. I spent great time with his wife and his little son, they showed me Ghent and the neighbourhood and I really enjoyed riding the bike everywhere! I also had a great weekend in Bruxelles with friends, whose leitmotiv was of course Belgian beer!*

*Thanks to yESAO Exchange Award, this year I had the opportunity to spend one week in Belgium at UZ Ghent. This was a wonderful experience I will never forget!*