

ESVS educational travel grant report

The first procedure I attended while still a medical student at the University Medical Center Utrecht was an EVAR, and it immediately sparked my interest. A few years down the line, I am now studying the aorta full time as a PhD student. The research for my PhD thesis is part of an ongoing collaboration between the departments of vascular surgery at the University Medical Center Utrecht, the Netherlands; Policlinico San Donato IRCCS, in Milan, and the department of biomedical engineering at the University of Pavia, both in Italy.

Thanks to the ESVS Educational Travel Grant, I have been able to travel between Utrecht, Milan, and Pavia, to work on various research projects under the supervision of Prof Moll, dr van Herwaarden, Prof Trimarchi, vascular surgeons, and Prof Auricchio, civil engineer. Thus, I have been able to collect data and attend research meetings in Utrecht. For example, I have gathered midterm follow-up outcomes of a cohort of patients treated with chimney EVAR. Also, I gathered ECG-gated CTA imaging, which we analyzed further in Pavia to study aortic distensibility, focusing not only on conformational changes in radial direction, but in longitudinal direction as well. Furthermore, I have worked on different projects in the BETA-laboratory (Biomechanics in Endovascular Treatment of the Aorta), in Pavia. Using *ex vivo* porcine aortas and a pulsatile flow loop, we studied the effect of stent graft deployment on aortic pulse wave velocity.

I have had the opportunity to present an overview of the studies from our research group at the 2017 Charing Cross Symposium, which was an exciting new experience. Moreover, we prepared several different manuscripts, and three of them have recently been accepted for publication; two more manuscripts have been submitted recently, and will hopefully find a suitable journal.

All of these experiences have taught me how to do clinical and translational research, how to present the results to an audience during a conference, how to report them in a manuscript, how to deal with a rejected manuscript, and how to make the necessary adjustments so that it can be published in another journal. More importantly, it has made it abundantly clear to me that doing research is a team effort. It is hard to measure objectively the value of learning how to communicate across different disciplines and cultures, but it feels like an enrichment. I hope to be able to bring these acquired skills into practice once I finish my training as a surgeon, and to contribute to European collaboration. Until then, I can only express my gratitude for being part of this team, and for the support that the ESVS has given.

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