

ESVS Educational Travel Grant – report

Gilles Soenens

This travel grant is – to my knowledge – the first one that the ESVS has granted for a pure research stay. I'm a surgical trainee, combining my training with a PhD trajectory in Vascular Surgery. At Ghent University Hospital in Belgium, we have a Black Box in our hybrid room. After a pilot study, it was clear that radiation safety behaviour should be optimized within our centre. Therefore, a Massive Open Online Course (MOOC) was developed, combining e-learning with multiple choice question tests, video based learning and a serious game. After rigorous international testing, we implemented this MOOC locally and offered it to all our nurses, anaesthesiologists and surgeons active in the hybrid room. Before and after implementation, 100 elective endovascular cases were captured using the Black Box.

The Black Box in the operating room was initially invented by Prof. Teodor Grantcharov, a laparoscopic gastro-intestinal surgeon in Toronto, Canada. He created a spin-off company, Surgical Safety Technologies Inc (SST) at the International Centre for Surgical Safety (ICSS). Prof. Grantcharov was previously working at St. Michaels Hospital in Toronto, Canada, but is now affiliated to Stanford University, CA, USA as a professor of surgery. Currently, the Black Box is integrated in 24 hospitals across North America and Europe. At the Toronto headquarters, tremendous video-analysis experience is available, as well as specialized software that synchronizes all data feeds. Clinical work was not planned during this stay.

During my three month research stay, I was able to analyse radiation safety behaviour using a previously validated radiation safety scale and analyse non-technical skills of elective aortic procedures. The availability of dedicated software, analysis experience and personal support has enormously aided my data analysis. In total, 421 hours of video was analyzed (for your information: that is 17.5 full days...).

Moreover, a collaborative project with SST and Stanford University was initiated during the research stay about flow patterns in the hybrid room. Lastly, my research findings were condensed into abstracts which were submitted to present on the upcoming ESVS annual meeting.

I would like to thank Teodor Grantcharov and Vanessa Palter for the kind invitation and warm welcome. The great company atmosphere made me feel like I was home from the first day. I will always remember this research stay and made some lifelong connections.

Finally, I would also like to thank the ESVS to facilitate this unique experience in the wonderful city of Toronto (beautiful and friendly, even in winter). The provided grant shows much the society values research and supports young vascular surgery residents to enlarge their horizon, create a network and improve research expertise in this case. I am very grateful for this fantastic opportunity.

Gilles Soenens

PhD candidate Vascular Surgery, Surgical trainee

Ghent, Belgium