

Biography Katarina Svanberg

Katarina Svanberg is an M.D. and a Ph.D and holds a professorship in Oncology at Lund University, Sweden as well as at South China Normal University in Guangzhou, China. She started her research career by studying laser light interaction in biological tissue and is among the early clinical researchers in biomedical optics and photonics for medical applications. Her PhD thesis in Medical Science presented preclinical research work within experimental photodynamic therapy and tissue spectroscopy. The post doc research activity was focussed on clinical applications of the preclinical achievements. Katarina Svanberg has combined her clinical activity with research work and thus been able to introduce a new cancer treatment modality in Oncology (Photodynamic Therapy) at the Lund University Hospital. She has been a key person in the collaboration in between several clinics and departments at Lund University in introducing and applying laser-induced fluorescence spectroscopy for early tumour detection. Katarina Svanberg has also been involved in developing a new method for gas monitoring; Gas in Scattering Media Absorption Spectroscopy (GASMAS) in the human body and this technique has been applied in the diagnosis of sinusitis. GASMAS also seems promising for in situ real time surveillance of preterm babies controlling their lung function. She has been active in transferring spectroscopic biomedical techniques to the third world and has also been involved in clinical work in Africa. Katarina Svanberg has coauthored more than 150 peer reviewed papers and contributed with book chapters in the field and also organized many international conferences in Biomedical Optics. She is a board member of the Lund Laser Centre and since 1993 she has served as the director of the Lund University Medical Laser Centre, where she now is the chair of the Board. Katarina Svanberg is a board member at the UNESCO International Centre for Theoretical Physics (ICTP) in Trieste, Italy and has been a member in many international advisory committees including at FDA and NIH in the US. She was a member of the steering committee for the UNESCO proclaimed Year of Light 2015. During the period 2005-2008 she was a director at large of the Board of the International Society for Optics and Photonics (SPIE) and during the period 2009-2012 in the presidential chain of the society where she served as the President of SPIE in 2011. She is a fellow of SPIE and of the Electromagnetic Research Society (PIERS). She was awarded the National Institute of Health (NIH) Lifetime Achievement Award in Biophotonics for Pioneering Work 2015 and the SPIE Gold Medal 2017.

