ESTRO

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ESTRO background

Being an ESTRO member since many years, I have had, and still have, several active roles:

Current ESTRO activities

- Member of the ESTRO Education Council
- Director of the ESTRO course Physics for modern Radiotherapy
- Director of the ESTRO Physics Research Course
- Co-director of the AIRO-ESTRO Advanced Technology course in India (from 2020)
- Participant in the ESTRO FUTURE initiative for definition of possible future (research) directions for physics in radiotherapy
- Participant of a working group on updating the Core Curriculum for medical physics in radiotherapy
- Member of the Physics Scientific Advisory Group for ESTRO's 2020 annual meeting in Vienna

Past ESTRO activities

- Member of the ESTRO Physics Committee (2007-2019)
- Co-chair (together with Yolande Lievens) of the Scientific Program Committee of ESTRO's 2016 annual meeting
- Co-chair (together with Dirk Verellen) of ESTRO's pre-meeting course "Machine learning for physicists" (Milan 2019)
- Co-chair (together with Dirk Verellen) of the "Automate or Perish" track of the 1st ESTRO physics workshop (Glasgow 2017)
- Co-chair (together with Marianne Aznar) of the "Realtime and adaptive management of anatomical variations" track of the 2nd ESTRO physics workshop (Malaga 2018)
- Member of the Physics Scientific Advisory Group for ESTRO's annual meetings (many years)
- Co-director (together with Markus Alber) of ESTRO's pre-conference course Current Advancements in Treatment Planning and Optimization (Vienna, 2014)
- Director of ESTRO's pre-conference course Advanced photon beam dose delivery systems and techniques (London 2011)

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Experience in radiotherapy

Since 1992: Medical physicist / faculty member at the department of Radiation Oncology of the Erasmus MC

2003-2006: Research Director of Medical Physics, division of Medical Physics of the department of Radiation Oncology

2006-2015: Head division of Medical Physics

2002-2005: Associate Professor at the Erasmus University Rotterdam

2005-: Full professor in Radiation Oncology Physics at the Erasmus University Rotterdam

As visible above, I am working since many years as a medical physicist. Apart from that, experience in directing a medical physics department (~55 employees) has been obtained, and a university career has been built up.

Solving real clinical problems has always been the major focus in my career. The applied methods were generally research and innovation. Projects were performed in various areas, mainly automated treatment plan generation, computer optimization of (non-coplanar) beam angles, image-guided radiotherapy (IGRT), adaptive radiotherapy (ART), stereotactic body radiation therapy (SBRT), proton therapy, and development of procedures and software for enhancement of patient safety, including electronic portal imaging (EPID) based in-vivo dosimetry.

The innovation and research activities have been performed by teams with students as central pillars, collaborating closely with radiation oncologists, medical physicists, RTTs, mathematicians, computer scientists and others. Being a medical physicist, I am proud to say that many of the projects have not only resulted in scientific output (section Qualifications), but also in clinical applications, both in our center and outside. Collaborations with companies were often an important means for getting innovations into clinics.

Important to note is also my involvement in several IAEA missions, focussing on improvement of radiotherapy in Low and Middle Income Countries.

Education

- BSc and MSc in experimental physics
- PhD in Molecular and Laser Physics. Title thesis: Photo-excitation and dissociation of small molecular clusters

Qualifications

- Medical physicist

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- Professor in Radiation Oncology Physics
- ESTRO Emmanuel van der Schueren Award 2017, "… a recognition of the excellence of your scientific work and of the enormous contribution you have made within ESTRO, in the field of education and in the promotion of radiation oncology as a discipline."
- (co)-author of ~210 peer-reviewed publications, Scopus h-index 50.
- Frequent international invitations for lectures
- Visiting professor at the Systems Research Institute of the Polish Academy of Sciences, Warsaw, Poland
- Member of the Editorial Board of Radiotherapy and Oncology
- Associate editor of Medical Physics

Personal

Both in my private and professional life, interest in and respect for people around me are naturally leading. This also implies that I am generally honest and open about my opinions, always with a focus to improve or help, and eager to change views based on arguments provided by others. Only open and respectful discussions and collaborations can result in optimal performance.

Final statement

One of the main and unique assets of ESTRO is its interdisciplinary nature with clinicians, physicists, RTTs and biologists all working together to maximally enhance clinical practice in Europe and beyond. Being a medical physicist, if elected, I will maximally promote opportunities for medical physics and medical physicists in achieving commonly defined goals. Having a large and functional international network in- and outside ESTRO, vast experience in clinical medical physics and R&D and education, and a strong drive to further strengthen radiotherapy and ESTRO, I feel ready for a board position.