



**Núria Jornet**

#### Position

Since March 1993 I have worked as a Clinical Medical Physicist in the Department of Medical Physics and Radiation Protection of Sant Pau Hospital in Barcelona, which is one of the Hospitals of the Universitat Autònoma de Barcelona (UAB). I am now Senior Consultant, working both in clinic and in clinical applied research in collaboration with other departments within and outside the hospital.

#### Society background

From the very beginning of my career as a medical physicist I have been closely linked to ESTRO, e.g. I contributed to the ESTRO booklet number 5 (2001) on in vivo dosimetry with diodes. During the last decade, I have served in the Education Council, have had the privilege to be a faculty member of the Dose Modelling and Dose verification course and act also as course director of the Quality Assessment and Improvement course. Since 2013 I have been chair of the ESTRO physics committee, leaving this position in 2019. During my mandate, I aimed to align the physics committee activities to the needs of our members and launched two surveys on this. Furthermore, we have initiated the new Physics Workshop on Science and Development to enhance networking and to facilitate professional and scientific exchange between medical physicists in Europe and beyond. We are also working to shape the future of medical physicists in Radiation Oncology with two initiatives the Future Task Group and the revision of the Core Curriculum of Medical Physics in RO.

#### Statement

I am proud of being a member of ESTRO, a society that brings together all professions working to improve cancer treatments and quality of life of radiotherapy patients. Having served in many positions in committees and courses in ESTRO I have gained a broad perspective of the society. It is my vision that we continue empowering our society as a leading community in cancer care. To achieve this, we have to find the balance between supporting the growth of each discipline independently and promoting what is the beauty and strength of ESTRO, a close collaboration between all sub-disciplines. Activities promoting networks, such as the new *Physics Workshops on Research and Development*, can be excellent platforms for all disciplines. The next decade will bring major changes in the way we work, mainly driven by the need for more automation, and the upcoming machine learning and artificial intelligence algorithms. It is of utmost importance to discuss how training programmes of all disciplines should be shaped in order to be prepared to implement these new methodologies safely and efficiently .

I will continue to serve our members, striving to add value to our society and its membership for the benefit of patients.

#### Experience and Qualifications

I was born in Barcelona in 1968. After my basic school education, I studied Physics and graduated at the Universitat Autònoma de Barcelona in 1991. Then, I received a grant from the Catalan Government to follow a Master in Medical Physics at the University Paul Sabatier (Toulouse). When going back to Barcelona I got a permanent position at Sant Pau hospital where I started working as a clinical physicist in the Medical Physics Department. In 2003 I defended my PhD, which dealt with *in vivo dosimetry* with

diodes for high energy x-ray beams. In 2017, I was accredited as a University Lecturer and in 2018 I have been awarded the ESTRO Emmanuel van der Schueren award.

I started my professional career in medical physics because I wanted to use my physics knowledge to advance both the diagnostics and the therapy of cancer patients. My main priorities are the implementation of latest research achievements into clinical practice and the improvement of the quality of radiation oncology treatments. Our clinical department has built strong links with research groups at the Faculty of Physics (UB), BarcelonaTech (UPC), and Faculty of Biology (UAB) with whom we share different research projects; furthermore, we have strong collaborations in teaching. Our projects focus on in vivo dosimetry, dose calculation in heterogeneities for high-energy x-ray beams, skin dose calculation and measurement as well as biological dosimetry. Recently, we have also started a research line on dose evaluation for cardiac imaging with cone beam CTs. Overall these collaborations resulted in 25 papers in peer reviewed journals, around 140 communications in meetings and 10 funded research projects. I am also IAEA expert participating in teaching and QUATRO clinical audit missions. I am associate editor of PhiRo and Physica Medica.

#### Personal

My hobbies are reading, listening to music, skiing, hiking and enjoying the company of my family and friends.

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