

Name: Marc AGG Vooijs

Affiliation Department of Radiation Oncology Maastricht University Medical Centre+
City; Maastricht
Country; The Netherlands

ESTRO background: I have been an ESTRO member for over 8 years and enjoyed numerous ESTRO organized meetings which have led to inspiring contacts and several fruitful -longer term- collaborations and publications. As a molecular biologist and 'outsider' coming into the field of Radiation Oncology in 2010, I have always felt very welcome. I have participated in several teaching activities at ESTRO (and FORUM) meetings and in a yESTRO organized symposium on career development: "how to be successful in ERC grant writing". This has led to my rapid introduction into the field and increasing my professional network. In 2017 I was involved in the scientific organization of the RB track of ESTRO37 as a member and in 2018 as a Chair for the RB track of ESTRO38. I am a member of the ESTRO RadioBiology committee.

Experience: The main interest of our laboratory is to exploit the tumor microenvironment to improve combination treatments with radiotherapy in cancer. Our main focus is on tumor stem cells and tumor hypoxia. In our lab together with physicist Frank Verhaegen at Maastricht University we pioneered the development of small animal radiotherapy and imaging platforms to improve preclinical therapy models. More recently our lab together with medical oncologists and radiation oncologists at MUMC+ has begun with the derivation and maintenance of primary normal and tumor tissue from cancer patients (as organoids). We are using these models to identify key drivers of treatment resistance and biomarkers for tissue toxicity. Research in the laboratory has led to several investigator driven (*first-in-human*) clinical trials conducted in collaboration with the MUMC+ and MAASTRO Clinic and to the development of new lead compounds that are under investigation. PI's in our laboratory have fulfilled diverse junior and senior roles in the national and international organizations of Radiotherapy and Radiobiology. I am a board member of the Dutch Society for Radiobiology (NVRB).

Education and Qualifications: Before I graduated Cum Laude in Medical Biology with a focus on genetics, molecular and cell biology at Radboud-UMC in the Netherlands, I did internships at UCSF and Lawrence Livermore Laboratories in California, USA and Silvius Laboratories at Leiden University in the area of tumor cytogenetics. I obtained my PhD with Anton Berns at the Netherlands Cancer Institute where we pioneered the development of conditional KO mouse models and received my PhD in 2001 at the University of Amsterdam. As a Dutch Cancer Society fellow, I worked as a postdoc with Raphael Kopan at Washington University Medical School in St Louis for three years where I developed a novel lineage tracing mouse model and studied the mechanism of Notch receptor signaling. I continued this fellowship with Hans Clevers at the Hubrecht Stem Cell Institute in Utrecht in 2006. In 2007 I started as a group leader and head of laboratory at the Department of Pathology at the University Medical Centre in Utrecht. Here I developed a strong interest and expertise in tumor hypoxia signaling with a specific focus on the role of HIF transcription factors. In 2010 I moved my group to Maastricht University Medical Centre (MUMC+) at the department of radiotherapy where I became head of the research laboratory (MAASTRO Lab) and professor in tumor microenvironment. MAASTRO Lab has strong interactions with MAASTRO Clinic, the largest radiotherapy out-patient-clinic in the southeast of the Netherlands. In 2018 I became manager research and education and member of the daily board at MAASTRO Clinic. Together with MAASTRO-ZON-PTC we will be one of three centers' in the Netherlands that will also provide proton therapy. MAASTRO clinic and MAASTRO Lab are very well established in the field radiotherapy and I am proud on what we have achieved together. Since 2012 I am also program leader in basic and translational cancer biology programme in our oncology graduate school (GROW) representing 13 PI's , and received excellent scores during international site-visit in 2012 and in 2018. In the period 2010-2018 the Radiotherapy laboratory has employed 5 staff scientists and trained 18 PhD's and is still mostly grant-funded. For our research I was awarded three ERC grants (ERC starting grant (2007), ERC consolidator Grant (2013) and ERC proof of concept (2012)). I am an (associate) editor and reviewer at several international journals and a frequent reviewer for national and international funding agencies. I have been part/chairing scientific committees reviewing science institutes in Poland and the UK and have

been part of Stand up to 2 Cancer Scientific advisory committee. I have published 90 peer reviewed publications and have an h-index of 38.

Personal: I was born in Nijmegen, the Netherlands in 1965 am married and have three kids that are all living by themselves, working, studying or traveling. I have lived abroad for several years when I was a child, when I was student and with my own family as a postdoc. I love the outdoors, bicycles and cycling and making chutneys and chili pepper sauces.

My Vision: The incidence of cancer is still rising and poses a major health and economic challenge for Europe. Cancer is a heterogenous, complex disease that demands new personalized and precision approaches. Increasing our fundamental understanding of the biological basis of cancer progression and treatment resistance remains pivotal to the development of new insights to improve cancer control while maintaining the best possible quality of life. ESTRO can play a central role in disseminating this knowledge within our community and to facilitate and promote the translation of these findings into multidisciplinary teams that will guide new clinical studies and guidelines to improve cancer outcome and care in the next decade.

My Role: My strong scientific background in molecular biology brings experience, knowledge and new networks to ESTRO. This experience is key to identifying and attracting new researchers into our society that bring novel technologies and biological insight which can be applied to personalize cancer treatment and improve quality of life and outcome. As a member of the ESTRO radiobiology committee I am committed to the continuous integration of biology into our multidisciplinary field of Radiotherapy and actively support ESTRO's vision and strategy towards optimizing radiation therapy for all cancer patients. The RadioBiology committee will develop more ways to improve knowledge dissemination to our members directly and through publishing journals and to provide up-to-date biology in -multidisciplinary- teaching courses, workshops and ESTRO meetings. This will promote the collaborative engagement of clinicians, RTTs, physicists with biologists necessary to accelerate implementation of new knowledge and treatments. We will actively strengthen the network of ESTRO biologists by recruiting new members and identifying and supporting funding opportunities to increase multidisciplinary fundamental and translational research with the aim to bring research faster to practice. To achieve this goal the ESTRO board needs to consolidate successful services and pursue innovative ways to increase 'active' membership and to strengthen our society. I recognize that these tasks will require the concerted effort of all its board members and that I will have a key role in representing and monitoring the 'radiation biology' perspective. I hope together we can contribute to the further implementation of Radiotherapy as a mainstay curative treatment available to everybody.