

EDITORIAL

And they lived happily ever after... The marriage of Nordic Association for Clinical Physics and Acta Oncologica

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Acta Oncologica is a well-established international oncological journal, but has still an indisputable Nordic base, both through its role as the journal for the national oncological societies in the five Nordic countries, but also in terms of readership and the geographical spread of submissions and papers. This Nordic perspective within a global operation area is to a large extent shared with another Nordic institution, the Nordic Association for Clinical Physics (NACP). NACP started its activities already back in 1962 through arranging scientific meetings, and was formally founded in 1965, with individual medical physicists in the Nordic countries as members. During the following years, NACP made important contributions, for example to the development of two cornerstones of modern radiotherapy, computer-based treatment planning and dosimetry protocols. After a quiescent period of almost 15 years, NACP was revitalised in a meeting held in Bergen, Norway in 2004, with the approval of a new constitution. Further details about the history of NACP have been published in a previous editorial in this journal [1]. Since 2010, Acta Oncologica has been an official journal for NACP, and negotiations concerning journal distribution are ongoing.

The tradition with dedicated issues of Acta Oncologica with papers presented at NACP symposia is actually a very short one. The first NACP symposium after the new constitution (held in Aarhus, Denmark in 2008) resulted in the first issue of this kind, compiled in early summer 2008 just before the symposium and (for technical reasons) published in early 2009. This meeting was held 'back-to-back' with an Acta Oncologica symposium on image-guided radiotherapy [2], a set-up that has been repeated this year

in Uppsala, and that hopefully will create precedence also for future NACP meetings which this far are scheduled to take place in 2014 in Finland and in 2017 in Norway.

The current issue contains 18 papers that were presented at the NACP2011 symposium held in Uppsala on April 14–15, 2011, as well as the papers presented at the co-localised Acta Oncologica Symposium on Particle Therapy. The programme of NACP2011 contained a good mix of invited talks from world-leading experts in both imaging and therapy [3,4] as well as proffered paper presentations from Nordic medical physicists working within both the imaging [5–8] and therapy [9–20] branches of our field. Following a general trend in medical physics, these two branches are also getting more intertwined, with imaging playing a crucial role for radiotherapy planning, adaptation and follow-up [9–11,13–18,20], and with therapy also being integrated into imaging procedures, like in clinical and pre-clinical radio-nuclide treatment [6]. Clearly, medical physics research in the Nordic countries is at the frontier in many of the research areas in our field, some examples being tracking [16,17] and particle therapy. For the latter, also the majority of the papers presented at the Acta Oncologica Symposium on Particle Therapy had a strong medical physics component, originating mostly from within the Nordic countries.

Besides the publication of issues from NACP symposia, Acta Oncologica is already receiving a healthy number of medical physics submissions [e.g. 21–26]. During recent years our journal has experienced a marked increase in both submissions and publications from this field (Figure 1), a trend that

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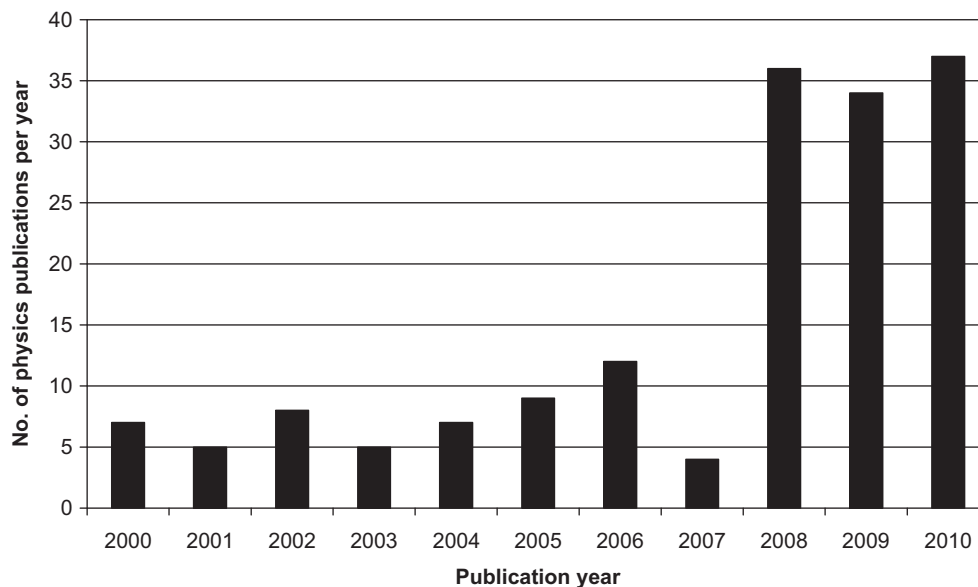


Figure 1. The marked increase in the number of annual medical physics publications in Acta Oncologica across the past decade, much due to the publication of papers from radiotherapy/medical physics symposia. For the construction of this graph, a medical physics paper was classified subjectively based on its topic and/or a medical physics affiliation for a considerable number of the authors of the publications.

likely reflects an increased scientific activity within medical physics in the Nordic countries. Medical physicists usually have a rather limited selection of journals to submit their papers to, including a few 'pure' medical physics journals and then the more clinically orientated journals in the field of application. Most journals are facing a growth in submission numbers, making it increasingly more demanding to have a paper accepted for publication. It is the ambition that the tighter connection between Nordic medical physicists and Acta Oncologica will be of mutual benefit; Nordic medical physicists have another journal to choose between when submitting their publications and Acta Oncologica are attracting from a wider audience, ultimately increasing the overall quality of the journal.

It should be pointed out that a proportion of medical physics is dealing with non-oncological applications; however, Acta Oncologica will accept and consider submissions from the whole field of medical physics, as long as there are some cross-disciplinary features (typically imaging development) that could be relevant also for oncology. As already mentioned, there is an increasing focus on imaging in radiation oncology. This will require radiotherapy physicists to increase their competence in the different aspects of imaging, for example image formation, reconstruction and analysis across the various relevant imaging modalities (mainly CT, MRI, PET and SPECT). On the contrary, methods, principles and mindsets from radiotherapy physics are likely to be of interest and benefit also for fields outside radiotherapy, such as disease assessment during/after

therapy and modelling of treatment effects and morbidity [27].

Like in all marriages good communication and mutual respect and understanding are fundamental components for happy co-existence. Acta Oncologica is prepared for a further high medical physics publishing activity (e.g. through the appointment of a dedicated medical physics editor) and is also continuing to offer support for the arrangement of both Acta Oncologica lectures and symposia. For NACP and the national societies under NACP, this should be taken advantage of to further strengthen the scientific components of their activities in the future.

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