

In reply to the letter to the editor: "In reply to Fiorino et al: The central role of the radiation oncologist in the multidisciplinary and multi-professional model of modern radiation therapy"

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Letter to the Editor

In reply to the letter to the editor: “In reply to Fiorino et al: The central role of the radiation oncologist in the multidisciplinary and multi-professional model of modern radiation therapy”



To the Editor

We thank Alongi and colleagues for their letter [1] that gives us the opportunity to better highlight and expand the spirit and the content of our paper on “grand challenges for medical physics” [2].

As explained in our paper, the conclusions resulted from a thorough and inclusive preparatory path driven by the ESTRO FUTURE physics group [3,4], involving the ESTRO physics community (that participated in an initial on-line survey) and many experts outside this community, including radiation oncologists as well as others. One of the cornerstones of this process was the involvement of “out-of-the-field” experts, taking the opportunity to feed into our field with different and challenging points of view on the four major items identified through the preparation phase.

This process culminated with a one-day workshop bringing together 36 experts, including several leading radiation oncologists, but also imaging and computer scientists, biologists and others who openly debated these issues. The title of the meeting was: “the most provocative questions to medical physics in radiation oncology”. We therefore aimed to be provocative in order to stimulate a lively discussion that was ultimately the inspiring basis of our paper. Clearly, the task to move forward in identifying new horizons for medical physics addressing new challenges (condensed in the four selected issues) was the one which is reflected in the visions and directions depicted in this paper.

Even due to this very inclusive yet directed process, we do not fully understand the surprise raised by the authors regarding a possible omission of the role of radiation oncologists. Radiation oncologists were included in the process, however, as the title of our paper clearly states, the goal was to identify and discuss “grand challenges” for *medical physics* in radiation oncology, not radiation oncology in general. We would be very pleased to see similar initiatives from other branches of the multi-disciplinary field of radiation oncology, leading to mutually enriching perspectives.

Furthermore, we would like to emphasize that the key items, summarized in Table I of our paper, as well as the final (visionary) remarks [2] focused exclusively on what medical physics is expected to do and not what others should not do.

To summarize our main conclusions and putting them in clearer perspective, we foresee that the scientific and professional challenges of our times are pushing medical physics to “accelerate toward multi-disciplinarity” [3–7]. Connected to this, medical physicists are also expected to encounter and collaborate with other specialists that are currently not part of the main radiation oncology team. As also underlined by the authors of the letter, the radiation physics core will remain central to our profession (but not exclusive!), retaining “strong and pivotal roles in quality, safety and in managing ever more complex technologies” [5,8]. Clearly new challenges will require medical physicists “to continuously update skills and innovate education” [9], adapt curricula to include new fields, reinforce a multi-disciplinary attitude and the spirit of innovation. “Visionary and open leadership, which is able to merge established roles with the exciting new fields” is clearly required to effectively and successfully respond to current and future challenges.

The responsibility of radiation oncologists for leading the clinical process of treating patients needs no discussion, especially in the context of looking to new horizons and challenges for medical physics, both scientifically and professionally.

Finally, perfectly in line with the multi-disciplinary nature of radiation oncology and with the attitude and spirit of ESTRO, our paper underlined the need to work in synergy, in the same room and not in different separate rooms.

As we mentioned in our paper: “medical physicists should develop a mutually synergistic partnership with the other professionals in radiation oncology in leading our field together.”

The true driver of radiation oncology comes from the synergy created by the collaboration of all disciplines in the field (radiation oncologists, radiobiologists, RTTs and medical physicists) enabling us together to improve treatment of our patients.

New challenges, once more, reinforce the need to recognize that the best results come from a continuously updated team effort, overcoming outdated schemes: we should all be pulling in the same direction.

The only way that we will be able to face these new challenges effectively and impactfully is to do it together, in the same overarching ESTRO vision of creating “optimal health for all, together” [10].

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