PIANOFORTE Activity report – 50th meeting of the European Radiation Research Society 2026

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Thanks to PIANOFORTE travel grant for early career researchers, I had to opportunity to participate in the 50th meeting of the European Radiation Research Society (ERRS) in Oslo, Norway, held from the 6th to 9th of September 2026. This european research meeting is organized every year all around Europe and brings together worldwide experts in radiation research and extensive professional audience including young scientists. Consequently, it offers an exciting opportunity to share and discuss with scientists from all around the world, learn about new hot topics and to network with further potential collaborators.

The focus of this year was on following topics : Molecular and cellular radiation effects and DNA damage; High LET radiation, mixed fields, and space: biology and dosimetry; Emerging therapy approaches: FLASH, SFRT, targeted radionuclide therapy, combination treatment; Low dose, environment, radiation protection, and epidemiology; Modeling and new applications in omics, big data, and AI. This meeting allows me to attend to high quality plenary session providing a superb state of art overview in various radiation research aspects. Moreover, selected speakers and awardees delivered inspiring research stories. During 16 sessions and 45 posters onsite presentation, the audience could learn latest advances in radiation research and futures perspectives. I found talks on DNA damage and repair, new radiotherapy approaches, and radiosensitization of the tumor microenvironment particularly interesting. Talks on radiation effects on normal tissues were also highly relevant to my work on secondary primary cancers as late effects of radiotherapy. As my major research interest is the immune system, I was very interested in the talk on the radiosensitivity of different bone marrow cell populations. Finally, given my background in cardiac physiopathology, I appreciated the talk on radiation-induced cardiovascular and cerebrovascular effects.

For my part, I presented first results from my postdoctoral project on how obesity and sex hormones, act as potential modifiers of breast and endometrial cancer susceptibility to radiation exposure by altering tissue microenvironment and immune responses through bystander effects. This study is part of the PIANOFORTE-MIRAMARE project and I mainly focus on how these factors modulate the immune microenvironment. Discussion with young and more experimented scientists during poster sessions were highly valuable through constructive feedbacks and talks about possible perspectives.

ERRS meeting, allowed me to deepen my knowledge in radiation science, in every aspects. Furthermore, interactions with junior and senior scientists during breaks helped me to network and to gain new valuable contacts.

To conclude, I would like to express my sincere gratitude to PIANOFORTE for facilitating my participation at ERRS 2026.

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