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# Microbeam Radiation Biology and Its State-of-the-Art Technology

Guest Editors:

### **Message from the Guest Editors**

Dr. Michiyo Suzuki

Dr. Teruaki Konishi

Dr. Tomoo Funayama

Deadline for manuscript submissions: closed (30 September 2023) Dear Colleagues,

Microbeam irradiation technology has great potential as a powerful tool for the analysis of cell- or tissue-specific radiation effects, as well as for radiotherapy. This Special Issue focuses mainly on microbeam irradiation studies using cultured cells and model animals to clarify the effects of radiation at the molecular (DNA), cell, tissue, or individual level. Specifically, we aim to compare and systematically discuss various radiation effects such as the bystander effect, abscopal effect, and individual-level effects of microbeam irradiation. We also welcome reports regarding the latest progress in the development of microbeam irradiation technology for various radiations, such as heavy ions, protons, and X-ray photons. It evaluates the potential value of microbeams for both biological research and radiation therapy, and contributes to facilitating discussions on radiobiology with microbeam state-of-the-art technology.



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