

Organisée en collaboration avec l'axe et thème Cancer: biologie, pronostic et diagnostic



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## Radiation bystander effects: Mechanisms and health relevance

**RECHERCHE** 

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Extensive evidence indicates that oxidative damage induced in cells traversed by ionizing radiation can spread from the irradiated cells to neighboring bystander cells through redox-modulated intercellular communication mechanisms. Further, non-targeted tissues in partial body-irradiated animals were shown to experience stressful effects, including oxidative changes and cytotoxic effects. This phenomenon, termed the 'bystander response', has been postulated to have an impact on both the estimation of health risks of exposure to low dose/low fluence ionizing radiation and the induction of adverse health effects following radiotherapeutic treatments. Whilst contributing to enlighten the roles that intercellular communication plays under stress conditions, elucidation of the signaling events mediating bystander effects may contribute to enhancing the efficacy of radiotherapy and help attenuate its debilitating side-effects.

Un dîner sera servi sur place.

Conférence disponible en visioconférence.

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