

Monday, July 9, 2012

CANCER I

8:30 a.m. Presidents Ballroom I/II

- 8:30 a.m. Schreiber R. D. *
[Deconstructing Cancer Immunoediting](#) [#8126]
Cancer immunoediting is the process by which the immune system controls and shapes cancer.
- 9:10 a.m. Barcellos-Hoff M. H. * Balmain A. Costes S. V. Demaria S. Mao J. H.
[NSCOR: The Contribution of Non-Targeted Effects in HZE Cancer Risk](#) [#8021]
Our studies are focused: evaluating the contribution of NTE in mammary carcinogenesis, systems genetics of radiation carcinogenesis, and modeling radiation effects, all of which are supported by a bioinformatics team.
- 9:40 a.m. Held K. D. * Lumpkins S. Yang H. Magpayo N. Schuemann J.
[LET Dependence of Response of Irradiated and Bystander Cells to Very Low Fluences of Charged Particles in 2D and 3D](#) [#8018]
This work extends our finding of a significant increase in DNA damage in irradiated and bystander cells at very low particle fluences to consider the importance of LET, track structure, and tissue architecture (2D vs. 3D) in bystander effects.
- 10:00 a.m. BREAK
- 10:20 a.m. Datta K. * Suman S. Kallakury B. Fornace A. Jr.
[Exposure to Heavy Ion Radiation Induced Persistent Oxidative Stress in Mouse Intestine](#) [#8009]
Long-term functional dysregulation of mitochondria and increased NADPH oxidase activity are major contributing factors towards heavy ion radiation-induced persistent oxidative stress in mouse intestine with potential for neoplastic transformation.
- 10:40 a.m. Aroumougame A. * Chen D. J.
[Mechanism of HZE Particles Induced Chromosome Instability](#) [#8060]
In this work, we found that the difficulties associated with clustered DNA lesions repair and checkpoint release before the completion of DNA repair contribute to the formation of chromosome aberration following exposure to HZE particles.
- 11:00 a.m. Li C-Y. * Li F. Liu X. Brogan J. Bedford J. S. Peng Y.
[A Novel, Facilitative Role for Caspases in Space Radiation Induced Mutagenesis and Carcinogenesis](#) [#8068]
Caspases are generally considered as tumor suppressors. In this study, we observe that in contrary to conventional wisdom, they play a facilitative role in space radiation induced carcinogenesis.
- 11:20 a.m. Stewart F. A. *
[Risks and Mechanisms of Radiation-Induced Cardiovascular and Cerebrovascular Disease](#) [#8130]
Epidemiological studies have shown a clear association between high therapeutic doses of thoracic irradiation and increased risks of cardiovascular disease in long-term cancer survivors, although these effects may take decades to manifest.
- 12:00 p.m. LUNCH