


Speaker information

General Information

Name	Fabio Marongiu	
Email	fabiomarongiu@unica.it	
Contact Number	+390706758683	
Affiliation	Department of Biomedical Sciences - University of Cagliari	
Education Background	PhD in Chemotherapy of Viral infections Bachelor and Master's degree in Biomedical Sciences	
Professional Appointment	Associate Professor of General Pathology	
Research Interest	Regenerative medicine, Placental stem cells, Carcinogenesis, Aging, Clonal evolution.	
Website (if any)	https://web.unica.it/unica/page/it/fabio_marongiu	

Recent Publications

1. **Marongiu F**, Cheri S, Laconi E. *Clones of aging: When better fitness can be dangerous*. Eur J Cell Biol. 2023 Jul 6;102(3):151340.
2. Hill W, Lim EL, Weeden CE, Lee C, Augustine M, Chen K, Kuan FC, **Marongiu F**, Evans EJ et al. *Lung adenocarcinoma promotion by air pollutants*. Nature. 2023 Apr;616(7955):159-167
3. **Marongiu F**, DeGregori J. *The sculpting of somatic mutational landscapes by evolutionary forces and their impacts on aging-related disease*. Mol Oncol, 2022, 16(18), pp. 3238–3258
4. **Marongiu F**, Cheri S, Laconi E. *Cell competition, cooperation, and cancer*. Neoplasia, 2021, 23(10), pp. 1029–1036
5. Laconi E, Cheri S, Fanti M, **Marongiu F**. *Aging and cancer: The waning of community bonds*. Cells, 2021, 10(9), 2269
6. Serra M, **Marongiu F**, E Laconi. *Long-term moderate caloric restriction and social isolation synergize to induce anorexia-like behavior in rats*. Nutrition, 2021, 86, 111177
7. **Marongiu F**, Laconi E. *Cell competition in liver carcinogenesis*. World J Hepatol. 2020 Aug 27;12(8):475-484.
8. Passaretta F, Bosco D, Centurione L, Centurione MA, **Marongiu F***, Di Pietro R*. *Differential response to hepatic differentiation stimuli of amniotic epithelial cells isolated from four regions of the amniotic membrane*. J Cell Mol Med. 2020 Apr;24(7):4350-4355.
9. Laconi E, **Marongiu F**, DeGregori J. *Cancer as a disease of old age: changing mutational and microenvironmental landscapes*. Br J Cancer. 2020 Mar;122(7):943-952.
10. Gensous N, Ravaioli F, Pirazzini C, Gramignoli R, Ellis E, Storci G, Capri M, Strom S, Laconi E, Franceschi C, Garagnani P, **Marongiu F***, Bacalini MG*. *Aging and Caloric Restriction Modulate the DNA Methylation Profile of the Ribosomal RNA Locus in Human and Rat Liver*. Nutrients. 2020 Jan 21;12(2):277



The 2nd Symposium on Drug Discovery

July 2nd – 3rd, 2024 | Taipei, Taiwan

Speaker information

Speech Topic and Abstract

Title:

Cellular and Molecular Bases of Cancer and Tissue Regeneration during aging: elucidating mechanisms and devising strategies for intervention.

Abstract:

The evidence linking aging and cancer is overwhelming. Findings emerging from the field of regenerative medicine reinforce the notion that aging and cancer are profoundly interrelated in their pathogenetic pathways. I will discuss recent evidence from our lab that indicates that age-associated alterations in the tissue microenvironment contribute to the emergence of a neoplastic-prone tissue landscape, which is able to support the selective growth of preneoplastic cell populations. Interestingly, tissue contexts that are able to select for the growth of preneoplastic cells, including the aged liver microenvironment, are also supportive for the clonal expansion of normal, homotypic, transplanted cells, leading to regenerative processes. This suggests that the growth of normal and preneoplastic cells is possibly driven by similar mechanisms, implying that strategies based on principles of regenerative medicine might be applicable to modulate neoplastic disease.