

HOSTING GROUPS FOR INTERNATIONAL MOBILITY

Group denomination:

G.E.N.E.S.: Genetics Epigenetics Nutrigenomics and Environmental Studies

Team members:

- Fabio Caradonna, professor
- Flores Naselli, researcher
- Sara Volpes, Senior PhD student
- Paola Sofia Cardinale, Senior PhD Student
- Rossella Valenti, PhD Student
- Laura Greco, PhD Student
- Sabrina Micheli, biologist, volunteer

Team Topics:

- Cytogenetics
- Molecular cytogenetics
- Genotyping of genic polymorphisms
- DNA methylation status assessment
- Nutrigenetics
- Nutrigenomics.
- Environmental – DNA interactions study

Used Methodologies:

- Cell culture and viability
- Chromosome observations/studies
- RT-PCR with taqman chemistry
- COMET assay
- Genomic DNA methylation assay
- Gene promoter methylation assay

Labs in co-working:

- Lab of Cell biology (Group Leader: Prof. C. Luparello, University of Palermo)
- Lab of Marine Immunobiology (Group Leader: Prof. M. Cammarata, University of Palermo)
- Lab of Radioprotection (Group Leader: Prof. F. D'Errico, University of Pisa)
- Lab of Genetics (Group Leader: Prof. S. Saccone)

Selected publications

1. Global diversity in the TAS2R38 bitter taste receptor: revisiting a classic evolutionary PROPosal. Sci. Rep. 3; 6: 25506, 2016. <https://doi.org/10.1038/srep25506>.
2. The Binomial "Inflammation-Epigenetics" in Breast Cancer Progression and Bone Metastasis: IL-1 β Actions Are Influenced by TET Inhibitor in MCF-7 Cell Line. Int J Mol Sci. Dec 6;23(23):15422, 2022. <https://doi.org/10.3390/ijms232315422>.
3. Nutritional epigenomic and DNA-damage modulation effect of natural stilbenoids". Sci Rep. 4: 996, 2023 Jan 12;13(1):658. <https://doi.org/10.1038/s41598-022-27260-1>.
4. Indicaxanthin Induces Autophagy in Intestinal Epithelial Cancer Cells by Epigenetic Mechanisms Involving DNA Methylation". Nutrients 2023, 15, 3495. <https://doi.org/10.3390/nu15153495>.
5. An alternative approach of TUNEL assay to specifically characterize DNA fragmentation in cell model systems". Histochem Cell Biol. 2024 Jun 28. <https://doi.org/10.1007/s00418-024-02306-9>.

Group leader photo:



Group photo:

