

Name: Lorena Urbanelli

Place and date of birth: Perugia, 27th September 1970

Citizenship: Italian

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Education

2000 PhD in “Molecular and Cellular Biology and Pathology” at the University of Perugia.

1995 Degree in Biological Sciences, University of Perugia, 110/110 *cum laude*.

Research experience:

1995-2000 Research Fellow at IRBM “P. Angeletti”, Pomezia (Rome) (1995-1996 as Pre-Doc, 1996-2000 as PhD), working on (i) phage displayed peptide libraries specifically recognized by hepatitis C sera (as Pre-Doc Fellow), (ii) selection of ligands for HER2 oncogene and cell-surface receptors as tools for the early detection of tumors (as PhD Fellow); (iii) strategies to modify adenovirus tropism (as PhD Fellow)

2001-2007 Research contract at the University of Perugia, working on (i) lysosomal enzymes as early markers of AD; (ii) proteomic approaches to the discovery of biomarkers; (iii) regulation of lysosomal enzymes expression by Ras oncogene

2008 Staff scientist at the University of Perugia, working on (i) the regulation of autophagic-lysosomal pathway by Ras oncogene; (ii) miRNAs specifically lysosomal enzymes sorting to lysosomes; (iii) exosome release by breast cancer cells

Technical background

Biochemistry techniques: Enzymatic assays, Recombinant Proteins Expression and Purification,, Chromatography, SDS-PAGE, Immunoblotting, ELISA, 2D-PAGE. **Cell biology techniques:** cell cultures, transfections, baculoviral, adenoviral and retroviral vectors, FACS, subcellular fractionation, immunocytochemistry for optical and confocal microscopy. **Molecular Biology and phage display techniques:** PCR, RT-PCR, cloning, blotting, screening by hybridization, reporter assays, EMSA. ChIP, selection of phage displayed libraries. **Laboratory animals:** Mice immunization, tumor xenograft in nude mice. **Bioinformatic:** Data bank searches, Sequence analysis

Publications:

1. **Urbanelli L**, Magini A, Ercolani L, *et al.* Oncogenic H-Ras Up-Regulates Acid β -Hexosaminidase by a Mechanism Dependent on the Autophagy Regulator TFEB. *PLoS One*. 2014 Feb 24;9(2):e89485. doi: 10.1371/journal.pone.0089485. eCollection 2014.
2. Brozzi A., **Urbanelli L.**, Germain P.L., Magini A., Emiliani C. hLGDB: a database of human lysosomal genes and their regulation. *Database* 2013: bat024. doi: 10.1093/database/bat024.
3. **Urbanelli L**, Trivelli F, Ercolani E, *et al.* Cathepsin L increased level upon Ras mutants expression: the role of p38 and p44/42 MAPK signaling pathways. *Molecular and Cellular Biochemistry* 343: 49-57, 2010.
4. Emiliani C, **Urbanelli L**, Racanicchi L, *et al.* Up-regulation of glycohydrolases in Alzheimer's Disease fibroblasts correlates with ras activation. *J of Biol Chem* 278): 38453-60, 2003.
5. **Urbanelli L**, Ronchini C, Fontana L, Menard S, Orlandi R, Monaci P. Targeted gene transduction of mammalian cells expressing the HER2/neu receptor by filamentous phage. *J Mol Biol* 313: 965-76, 2001.