

Publications 2008 - today

- Righetto I, Filippini F. Pandemic Avian Influenza and Intra/Interhaemagglutinin Subtype Electrostatic Variation among Viruses Isolated from Avian, Mammalian, and Human Hosts. *Biomed Res Int*. 2018; 2018:3870508.
- Heidari A, Righetto I, Filippini F. Electrostatic Variation of Haemagglutinin as a Hallmark of the Evolution of Avian Influenza Viruses. *Sci Rep*. 2018; 8(1):1929.
- Vicentini N, Gatti T, Salerno N, Hernandez Gomez YS, Bellon M, Gallio S, Marega C, Filippini F, Menna E. Effect of different functionalized carbon nanostructures as fillers on the physical properties of biocompatible poly(L-lactic acid) composites. *Mater Chem Phys*. 2018; 214:265-76.
- de Marcos Lousa C, Soubeyrand E, Bolognese P, Wattelet-Boyer V, Bouyssou G, Marais C, Boutté Y, Filippini F, Moreau P. Subcellular localization and trafficking of phytolongins (non-SNARE longins) in the plant secretory pathway. *J Exp Bot*. 2016; pii: erw094.
- Scapin G, Bertalot T, Vicentini N, Gatti T, Tescari S, De Filippis V, Marega C, Menna E, Gasparella M, Parnigotto PP, Di Liddo R, Filippini F. Neuronal commitment of human circulating multipotent cells by carbon nanotube-polymer scaffolds and biomimetic peptides. *Nanomedicine (Lond)*. 2016; 11(15):1929-46.
- Vicentini N, Gatti T, Salice P, Scapin G, Marega C, Filippini F, Menna E. Covalent functionalization enables good dispersion and anisotropic orientation of multi-walled carbon nanotubes in a poly(L-lactic acid) electrospun nanofibrous matrix boosting neuronal differentiation. *Carbon*. 2015; 95:725-30.
- Scapin G, Salice P, Tescari S, Menna E, De Filippis V, Filippini F. Enhanced neuronal cell differentiation combining biomimetic peptides and a carbon nanotube-polymer scaffold. *Nanomedicine*. 2015; 11(3):621-32.
- Righetto I, Milani A, Cattoli G, Filippini F. Comparative structural analysis of haemagglutinin proteins from type A influenza viruses: conserved and variable features. *BMC Bioinformatics*. 2014; 15:363.
- De Franceschi N, Wild K, Schlacht A, Dacks JB, Sinning I, Filippini F. Longin and GAF domains: structural evolution and adaptation to the subcellular trafficking machinery. *Traffic*. 2014; 15(1):104-21.
- Plazzo AP, De Franceschi N, Da Broi F, Zonta F, Sanasi MF, Filippini F, Mongillo M. Bioinformatic and mutational analysis of channelrhodopsin-2 protein cation-conducting pathway. *J Biol Chem*. 2012; 287(7):4818-25.
- Vacca M, Albania L, Della Ragione F, Carpi A, Rossi V, Strazzullo M, De Franceschi N, Rossetto O, Filippini F, D'Esposito M. Alternative splicing of the human gene SYBL1 modulates protein domain architecture of Longin VAMP7/TI-VAMP, showing both non-SNARE and synaptobrevin-like isoforms. *BMC Mol Biol*. 2011; 12:26.
- Vivona S, Liu CW, Strop P, Rossi V, Filippini F, Brunger AT. The longin SNARE VAMP7/TI-VAMP adopts a closed conformation. *J Biol Chem*. 2010; 285(23):17965-73.
- Strazzullo M, Rossetti C, Fusco G, Campanile C, Vecchio D, Campanile G, Perucatti A, Di Meo GP, Filippini F, Eggen A, Ferrara L, D'Esposito M. Genomic characterization and chromosomal mapping of 5 river buffalo skeletal muscle differentiation master genes. *Cytogenet Genome Res*. 2010; 128(4):221-7.
- Vedovato M, Rossi V, Dacks JB, Filippini F. Comparative analysis of plant genomes allows the definition of the "Phytolongins": a novel non-SNARE longin domain protein family. *BMC Genomics*. 2009; 10:510.
- Vivona S, Gardy JL, Ramachandran S, Brinkman FS, Raghava GP, Flower DR, Filippini F. Computer-aided biotechnology: from immuno-informatics to reverse vaccinology. *Trends Biotechnol*. 2008; 26(4):190-200.

Ten selected publications (before 2008)

- Vivona S, Bernante F, Filippini F. NERVE: new enhanced reverse vaccinology environment. *BMC Biotechnol*. 2006; 6:35.
- Rossi V, Banfield DK, Vacca M, Dietrich LE, Ungermann C, D'Esposito M, Galli T, Filippini F. Longins and their longin domains: regulated SNAREs and multifunctional SNARE regulators. *Trends Biochem Sci*. 2004; 29(12):682-8.
- Rossi V, Picco R, Vacca M, D'Esposito M, D'Urso M, Galli T, Filippini F. VAMP subfamilies identified by specific R-SNARE motifs. *Biol Cell*. 2004; 96(4):251-6.
- Martinez-Arca S, Rudge R, Vacca M, Raposo G, Camonis J, Proux-Gillardeaux V, Daviet L, Formstecher E, Hamburger A, Filippini F, D'Esposito M, Galli T. A dual mechanism controlling the localization and function of exocytic v-SNAREs. *Proc Natl Acad Sci U S A*. 2003; 100(15):9011-6.
- Carpi A, Di Maira G, Vedovato M, Rossi V, Naccari T, Floriduz M, Terzi M, Filippini F. Comparative proteome bioinformatics: identification of a whole complement of putative protein tyrosine kinases in the model flowering plant *Arabidopsis thaliana*. *Proteomics*. 2002; 2(11):1494-503.
- Vacca M, Filippini F, Budillon A, Rossi V, Della Ragione F, De Bonis ML, Mercadante G, Manzati E, Gualandi F, Bigoni S, TrabANELLI C, Pini G, Calzolari E, Ferlini A, Meloni I, Hayek G, Zappella M, Renieri A, D'Urso M, D'Esposito M, Macdonald F, Kerr A, Dhanjal S, Hulten M. MECP2 gene mutation analysis in the British and Italian Rett Syndrome patients: hot spot map of the most recurrent mutations and bioinformatic analysis of a new MECP2 conserved region. *Brain Dev*. 2001; 23 Suppl 1:S246-50.
- Filippini F, Rossi V, Galli T, Budillon A, D'Urso M, D'Esposito M. Longins: a new evolutionary conserved VAMP family sharing a novel SNARE domain. *Trends Biochem Sci*. 2001; 26(7):407-9.
- Miano MG, Testa F, Filippini F, Trujillo M, Conte I, Lanzara C, Millan JM, De Bernardo C, Grammatico B, Mangino M, Torrente I, Carrozzo R, Simonelli F, Rinaldi E, Ventruto V, D'Urso M, Ayuso C, Ciccodicola A. Identification of novel RP2 mutations in a subset of X-linked retinitis pigmentosa families and prediction of new domains. *Hum Mutat*. 2001; 18(2):109-19.
- Barizza E, Lo Schiavo F, Terzi M, Filippini F. Evidence suggesting protein tyrosine phosphorylation in plants depends on the developmental conditions. *FEBS Lett*. 1999; 447(2-3):191-4.
- Filippini F, Rossi V, Marin O, Trovato M, Costantino P, Downey PM, Lo Schiavo F, Terzi M. A plant oncogene as a phosphatase. *Nature*. 1996 Feb 8; 379(6565):499-500.